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HUAI AND HAN

BY

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The typological and chronological investigation of the Chinese bronze age and early iron age has advanced considerably in the last decade. The early stages have been determined with a fair degree of reliability and precision. It was possible, thanks to a systematic investigation of inscribed bronzes¹, to establish a great period, defined as Middle Chou, which stylistically and historically could be clearly delimited against earlier stages and fairly precisely placed in the chronological scheme: it began almost abruptly circa 950 B. C. and ended (with isolated later survivals) around 650 B. C.

And then, as a second step, it was possible to clear up the earlier stages in their principal features.² It was shown that in Yin time, the centuries immediately before ca. 1100 B. C., there existed two great principal styles, the A style and the B style, possessing essentially the same types of ritual vessels, but differing widely in character, in decorative elements and in technique. The B style was largely derived from the A style, but it represented a softer, more elegant and refined, less forceful and masculine art. The Yin B style originated before the A style had outlived itself, and the two coexisted for some time in the very centre of An-yang. I cannot enter here once more upon all the details of this great and fundamental difference between the two Yin styles, but would refer to my extensive investigation just quoted.

After the accession of the Chou, some 150 years passed during which the influence of the Yin in the bronze art still dominated and lingered on. On the one hand, vessels continued to be cast both in A and B style. But besides this there arose a new variation, which I have called the Yin-Chou style. This was an epigonous art, working with the same vessel types and the same décor elements as the Yin art, but with certain modifications and new departures. On the whole it was a more barbarous and bombastic style, which, however, had the weakness inherent in an aftermath style on its way to degeneration, and, as stated just now, it was abruptly ousted by the Middle Chou style around 950 B. C.

When this Middle Chou style, which in many respects built on the earlier styles, especially in vessel types (though many shapes became obsolete), but which introduced important innovations both in regard to the classes and the shapes of vessels, and worked with an entirely new set of décor elements, had reigned supreme for some centuries, down to ca. 650 B. C., there blossomed forth a new grand style, the baroque of the

¹ B. Karlgren, *Yin and Chou in Chinese Bronzes*, in *Yin and Chou Researches* 1935, also in *BMFEA* 8, 1936.

² B. Karlgren, *New Studies on Chinese Bronzes*, *BMFEA* 9, 1937.

Chinese bronze age, which we call the Huai style, a denomination based on the earliest finds that were geographically localized in the Huai river valley. In regard to the ritual vessels this style again brought in great innovations. It took over some of the principal vessel shapes of the Middle Chou style, yet often with considerable modifications, and a series of other shapes became obsolete. In the décor, various sources of inspiration are discernible. While it introduced several innovations, it took over some elements from the neighbour art of the Ordos animal style¹, and it also revived (sometimes modified) several important features that had belonged to the Yin and Yin-Chou styles, but which had become antiquated and forgotten during the centuries of the Middle Chou style.

This latter phenomenon may seem strange at first sight, but on a close examination it is not so very remarkable. I shall allow myself to quote here what I wrote on the subject in 1939².

«Logically speaking there are four possible explanations, which we shall review successively.

1. It might be pointed out that the break in décor principles between Yin-Chou and Middle Chou was not entirely drastic, for a certain number of exceptions are still to be found: that Yin (Yin-Chou) elements were still extant in the Middle Chou bronze art, though reduced to a very modest position; in other words that side by side with pure Middle Chou vessels there were, all through the centuries 950—650, a certain number of hybrid vessels still preserving to a certain extent at least the décor schemes of Yin-Chou (1122—950). I might refer to my work in BMFEA 8 for some of these vessels: B 78, 95, 125, 131, 146, 169; C 97; D 62; E 17, 31. It might then be argued that the above-mentioned Yin (Yin-Chou) elements in Huai are due to the fact that they never quite died out during the Middle Chou era, but were still occasionally to be seen and could thus be picked up directly by the Huai style, which in many other respects, especially as regards vessel types, is an heir in direct line to the Middle Chou style.

I believe, however, this explanation to be unsatisfactory or at least inadequate. It is true that some of these elements, especially the T'ao-t'ie, the Spiral filling (*lei wen*) and the Free animal's head, though decidedly not belonging to the regular grammar, so to speak, of the Middle Chou style, did really occur occasionally, though very exceptionally, during that period. But other important Yin elements reappearing in Huai, and there playing an important part, such as Interlocked T's and Whorl circle, have been so completely ousted from Middle Chou, that their existence in Huai cannot possibly be imputed to an influence from hybrid Yin-Chou/Middle Chou vessels.

2. We might imagine that the Yin-Chou style, which was vigorously and suddenly ousted about 950 in Royal Chou and in its closest dependencies (the original «Middle Kingdoms» of the Chou confederacy), persisted for some centuries longer in the peripheric regions, such as Northern Shansi, Eastern Shantung and the Yang-tsi valley and in some of these regions directly influenced the nascent Huai style.

¹ B. Karlgren, *New Studies on Chinese Bronzes*, BMFEA 9, p. 97 ff.

² *Maandblad voor Beeldende Kunsten* 1939, p. 153.

There are, however, two important facts that seem to preclude this interpretation. On the one hand, we know of a considerable number of vessels which by their inscriptions must be placed in the centuries 950—650 B. C., not only from the central but also from the peripheric kingdoms, and none of these is in Yin-Chou style; as long as we have no safe *points d'appui* in the form of datable vessels proving the Yin-Chou style to have lingered later than 950 in some part of China, one may not work on such a theory. On the other hand, if the Huai style had connected directly with the Yin-Chou style in one or other of the «randstaaten», and there directly taken over the said Yin-Chou décor elements, it is nearly inconceivable that it could have adopted only its décor elements, but none of its fundamental vessel types. It must be remembered that the vessel types of Huai originate entirely from the Middle Chou style (Ting with curved legs, Sü vessels, Fu vessels, Ih vessels, Chung bells etc.) and are in no way reminiscent of a series of the vessel types dominating in Yin and Yin-Chou e. g.: Square Ting, round Ting with cylinder legs, Li-ting, Yu, Ku and Tsun, Tsüe and Kia. This seems to me to refute definitely any theory that the nascent Huai style connected directly with a living Yin-Chou style, even in limitrophe areas.

3. It is a fact that vessels in full Huai style can be attested to date as far back as the 6th and early 5th centuries in the most varying regions of China: Ch'u in Central Hupei, Wu in Kiangsu, Sü in Northern Anhwei, Chu in Southern Shantung, Ts'i in North-Central Shantung, Sung in Eastern Honan, Ch'en in East Central Honan, Ts'in in Shensi, and Han in the immediate vicinity of Royal Chou in Honan; moreover, some of them, e. g. the Piao bells, are in a very mature and advanced Huai style, and it therefore stands to reason that the birth of the Huai style must be placed much earlier. What is there then, it might be argued, to prevent us from assuming that the Huai style originated, say in the Yangtsi valley (Ch'u), as early as around 1000 B. C., and hence had all chances of direct contact with the Yin-Chou style at that time still fully flourishing? It could then, in its incipient stages in the Yangtsi valley, have borrowed the elements under discussion (T'ao-t'ie, Interlocked T's etc.) directly from the Yin-Chou.

To this explanation, which is in itself to my mind much more plausible than the last-mentioned one, must be raised the same objection as our second objection to that same theory 2: if Huai had taken over the décor elements directly from Yin-Chou, why should it have stood adamant against the whole array of its fundamental vessel types (Square Ting etc., see above)? That seems to me to be absolutely unreasonable.

The sole remaining explanation is therefore, in my opinion, the only acceptable one:

4. The Huai style artists built directly on the basis of the Middle Chou style. But their creative work went far beyond the narrow limits of that style. They introduced, on the vessel types largely taken over from Middle Chou but often considerably modified (e. g. the Squat Ting, several variations of the Hu flask etc.), a brilliant, rich and varied décor, to a large extent made up of new and previously entirely unencountered elements (hooks, plait pattern, rope pattern, dot filling or dot lines, several peculiar new geometrical patterns etc.). Their art was a most typical baroque, a new grand style, which was fundamentally characterised in that it was not a primitive, elementary, robust and forceful art

like the A style of Yin; not a discreet, dignified, sober art like the B style of Yin; not a clumsy and barbaric epigone art like the Yin-Chou; not a poor and mediocre art like the Middle Chou; but a self-conscious art, a highly sophisticated one working with all the paraphernalia and tricks of a pompous baroque. Such an art, keen on a brilliant impression of richness and variety, is prone to syncretistic methods, and it is only natural that its artists looked backwards and picked up a number of earlier elements (Yin and Yin-Chou) suitable to be embodied (duly modified and mollified) in their new décor schemes. In other words, during the 7th—3rd centuries B. C. the Chinese world was already sufficiently advanced in culture to allow of a conscious artistic renaissance movement, which incorporated elements now already ancient and venerated in the new pompous baroque style. It is quite possible that the slight lingering of Yin-Chou elements during the Middle Chou era, in the form of hybrid Yin-Chou/Middle Chou vessels, may have contributed to this loan movement, but on the whole I believe it must have been a conscious revival of décor features long since obsolete».

If the birth of the Huai style is thus clearly explainable and its complete predominance during the centuries ca. 650—ca. 200 B. C. is proved by inscribed vessels, there is one fundamental question that remains so far unanswered: when did the Huai style end? Did it survive the great historical earthquake of 221—210, the reign of Ts'in Shī huang ti, the abolition of feudalism and the creation of the centralized Chinese empire? Did it live on for some time into the era of the Western Han dynasty (206 B. C.—8 A. D.)? This is a question that has never been clearly posed, still less satisfactorily answered.

The various art historians and archaeologists¹ have expressed widely divergent opinions regarding many types of object, some dating them in pre-Han time and thus including them in the art of the Huai style era (often called »period of the Warring States», a misnomer, since the Huai style can be proved, by inscribed objects, to have started much earlier than the »Warring States»), others dating them in Western Han time and declaring their style to be the »Han style» as opposed to the earlier Huai style.

¹ In the present article the following abbreviations will be used:

Senoku = Senoku Seishō (Sumitomo catalogue).

Umehara, Seikwa = S. Umehara, *Shina Kodō Seikwa*.

Umehara, Kanizen = S. Umehara, *Kan izen no kokyō no kenkyū, L'étude sur le miroir antérieur à la dynastie des Han*, 1935.

Umehara, Rakuyō = S. Umehara, *Rakuyō Kinson kōbō shūei*, 1936.

Umehara, Senkoku = S. Umehara, *Senkoku shiki dōki no kenkyū, Etude des bronzes des royaumes combattants*, 1936.

White, Tombs = W. C. White, *Tombs of old Lo-yang*, 1934.

Kümmel, Gedächtnis = O. Kümmel, *Jörg Trübner zum Gedächtnis*, 1930.

Kümmel, Kunst = O. Kümmel, *Chinesische Kunst*, 1930.

Swallow = R. W. Swallow, *Ancient Chinese Bronze Mirrors*, 1937.

Karlbeck = O. Karlbeck, *Catalogue of the Collection of Chinese and Korean Bronzes at Hallwyl House*, 1938.

Yench'u = Liang Shang-ch'un, *Yen k'u ts'ang king*, 1940.

BMFEA = Bulletin of the Museum of Far Eastern Antiquities.

Some very good examples of this divergence of opinion are furnished by the treatment of early Chinese mirrors. Even in regard to the principal and leading types there has been much uncertainty as to their dates, whether they belong to the pre-Han period or the Western Han period. A mirror like our type D23 below was dated by Kümmel (O. Z. 1930, pl. 21: 1) »early Han, 2nd c. B. C.», by Umehara (Seikwa 4, pl. 29, 1933) »so-called Ts'in mirror, 4th-2nd c. B. C.». The mirror type D24 (25) was dated by Kümmel (Gedächtnis, pl. 36 b, 1930) »2nd—1st c. B. C.», by Westendorp (Maandblad 1934, p. 192) »7th—3rd c. B. C.». The mirror type D5 was dated by Kümmel (Kunst, pl. 29b, 1930) »2nd—1st c. B. C.», by Umehara (Seikwa 4, pl. 32, 1933) »so-called Ts'in mirror, 4th—2nd c. B. C.», The mirror type D11 was dated by K. Tomita (Bull. Mus. Fine Arts Boston 1931, p. 38 b) »2nd c. B. C.», by Kümmel (Gedächtnis pl. 39, 1930) likewise »2nd c. B. C.», by Umehara (Seikwa 4, pl. 31, 1933) »so-called Ts'in mirror, 4th—2nd c. B. C.». The mirror type D39 was dated by Kümmel (Kunst pl. 44 a, 1930) »2nd—1st c. B. C.», by Visser (Maandblad 1933, p. 191) »± 2nd c. B. C.», by Umehara (Seikwa 4, pl. 26 b) »so-called Ts'in mirror, 4th-3rd c. B. C.», and by Karlbeck (Karlbeck 1938) »end of 3rd c. B. C.». Inscribed mirrors of category F below have been dated by Visser (Maandblad 1931, p. 159) and Karlbeck (Karlbeck 1938, pl. 22) »2nd c. B. C.», but in The Chinese Exhibition, Commemorative Catalogue (1936, pl. 33), we find a very advanced specimen (with TLV) of this inscribed class dated »period of the Warring States». On the whole there has been a tendency, since W. C. White published his Tombs of Old Lo-yang (1934), in which a number of mirrors occur of types formerly mostly styled »Western Han», to move certain leading types (especially of our cat. D below) back to pre-Han times, though, as we shall see presently, the nature of the Kin-ts'un collections is not such as to warrant the drawing of such sweeping conclusions from such frail premises. Typical of this tendency is the most prolific writer on the subject of Chinese mirrors, S. Umehara. In his magnificent album *Shina kodō seikwa 4* (1933) he writes for various types of mirrors either »so-called Ts'in mirror, 5th—3rd c. B. C.», or »so-called Ts'in mirror, 4th—3rd c. B. C.» or »so-called Ts'in mirror, 4th—2nd c. B. C.», or even »so-called Ts'in mirror, 5th—2nd c. B. C.». By this he evidently implies that certain Huai style mirror types did not go later in time than the pre-Han era, whereas other Huai-style types flourished both in pre-Han and early Han times. But in his later work *Kan izen no kokyō no kenkyū* (1935) he has sweepingly placed all the mirrors not only of our categories C, D and E below but also of our cat. F in pre-Han time.

These various authors have arrived at their sometimes seriously divergent datings mostly by style criteria. Whether these criteria have been expressly stated (as often in Karlbeck's small but interesting Hallwyl catalogue of 1938), or have simply been implied in brief statements like »2nd c. B. C.» etc. following a mirror description, is not of decisive importance. In any case the procedure has been the regular one in art history: as objects appear in increasing numbers they group themselves naturally, to the eye of the experienced student, into stylistic groups. In this way there has gradually been formed the conception of two great stylistic categories as distinguished from each other, the Huai style and the Han style. But, as always, opinions may vary as to the

stylistic attribution of certain types of objects to the one or the other of these groups.

Indeed, a satisfactory chronological system can never be created by stylistic analysis alone. In the last resort, there must always be other criteria for nailing down the different types to definite historical periods. Such criteria are either closed finds datable through find conditions or through certain leading artifacts, or objects bearing datable inscriptions.

A striking example of this was the problem of the bronzes inlaid with gold and silver. For a long time it was an axiom — based on old Chinese imperial catalogues — that all such objects were of Han or later date. It needed the find of the Kin-ts'un graves, furnishing large groups of inlaid objects and datable in pre-Han time through various inscribed bronzes, to effect a revision of this conception and move certain categories of inlaid bronzes backwards in time into the pre-Han period.

Thus, the exclusively stylistic sorting of the specimens into Huai style and Han style can never give us a conclusive chronology for the centuries 650—0 B. C. The task of determining the periods and groups inside this long era must be solved through a combined analysis of style criteria and historical data, the latter furnished by closed finds or inscribed objects, or, preferably, both. But here we come up against very serious difficulties.

There is one factor which often makes Chinese archaeology an almost hopeless task: the lack of scientifically excavated closed finds. Such excavations have been carried out in the case, on the one hand, of Yin-time finds (An-yang) and early Chou finds (Sün-hien), and, on the other hand, of Eastern Han finds (Korea, Tongking)¹; but for the long period in question here, the period 650—0 B. C., there is, to my knowledge, not a single closed find that has been adequately investigated.

In recent years four great finds have been made which, though they have not been submitted to regular scientific excavations, are sufficiently known to allow us to speak of them as «closed finds»: Sin-cheng, Li-yü, Shou-chou and Kin-ts'un (near Lo-yang).

The Sin-cheng find (Honan, see map, our fig. 1), made in 1923, was first described in a work *Sin cheng ch'u t'u ku k'i t'u ch'i* 1923, by the Army Office of Honan, with very poor

¹ The magnificent Japanese excavations in Korea, especially in the ancient Lo-lang district, have rendered invaluable service in determining what is Eastern Han and what is post-Han. To a considerable extent they serve also to define — through negative evidence — what is earlier than Eastern Han. But the Korean material gives conclusive evidence only in the one direction: a type found in Lo-lang is as early as Eastern Han. It is not equally conclusive the other way: a type found in Lo-lang was not necessarily manufactured as late as Eastern Han. At the time of the Eastern Han, scholarly research into the archaeology of pre-Han times was already extensive, the rich Chinese were already collectors of antiques. This is strikingly illustrated by the Lo-lang finds. Along with a great many mirrors of Eastern Han type (such as we know to be Eastern Han through the inscriptions) there is one isolated fragment (Sekino, *Archaeological Researches on the Ancient Lo-lang district*, plates part 2, fig. 1278) of a type (our type C 45 below) which, as we shall find presently, was 3—400 years old when it was laid in the Lo-lang grave. Similarly these graves have yielded two jade *pi* very closely akin to jades from the Kin-ts'un tombs (*ibid.* plates part 1, figs. 438, 439); they were evidently precious antiques (heirlooms?) following the owner into his grave.

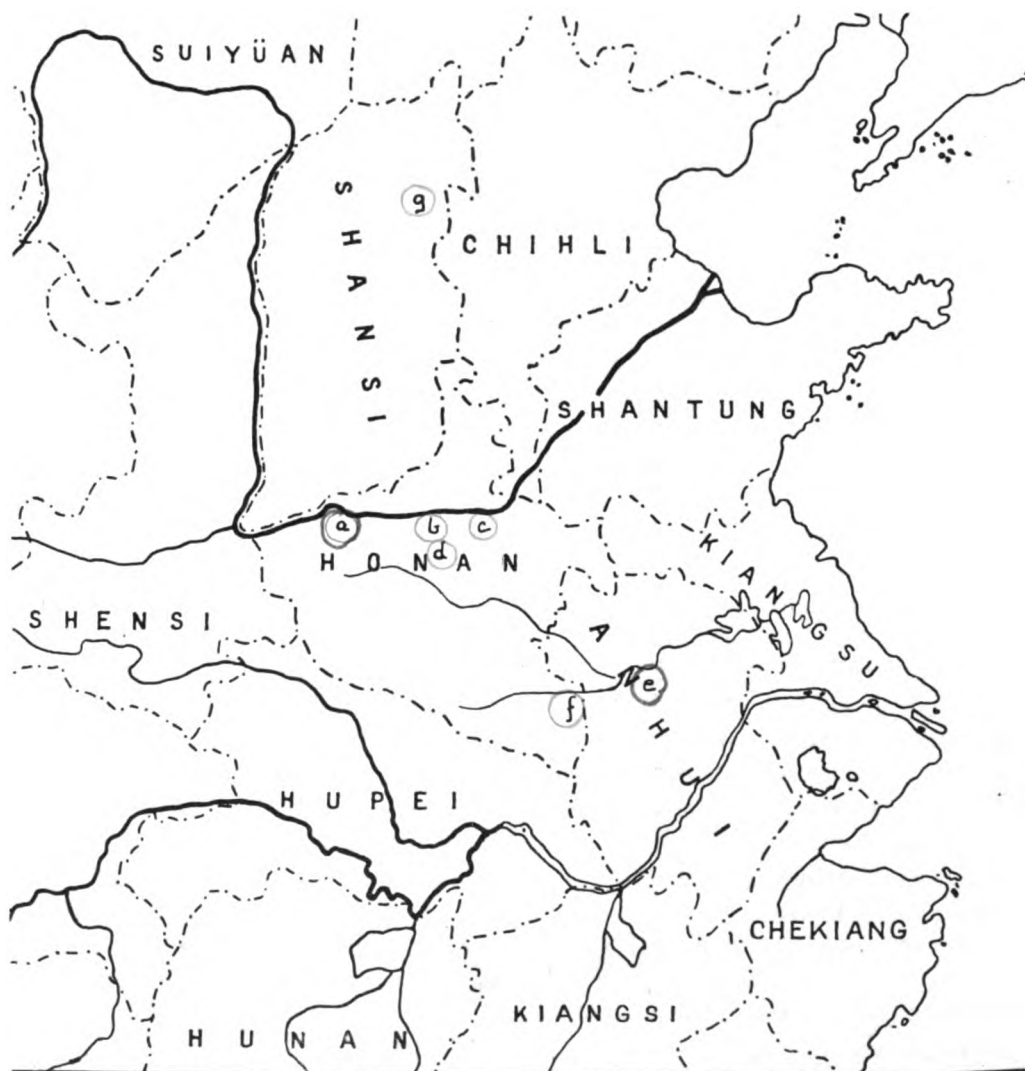


Fig. 1.

a = Lo-yang; b = Cheng-chou; c = K'ai-feng; d = Sin-cheng; e = Shou-chou; f = Ku-shi; g = Li-yü.

photographs, then in *Sin cheng ku k'i t'u lu* 1929, by Kuan Po-yi, with better, though still unsatisfactory reproductions, and finally in a quite good publication *Sin cheng yi k'i* 1937, by Sun Hai-po, with fairly good illustrations and many good rubbings. Some excellent rubbings are also to be found in *Ch'uan ku pie lu* 1928. A few of the principal vessels have been illustrated by S. Umehara (Umehara, Senkoku, 1936). The find, however, was very comprehensive, and only a part of its objects are sufficiently known through the said publications. We are told that — apart from objects scattered through art deal-

ers — the K'ai-feng Museum obtained 93 ritual vessels (19 Ting, 12 Kuei, 9 Li, 3 Lei, 2 Fu, 6 Hu, 4 big and 17 small bells etc.) and several hundred bronze fragments. The find is extremely important because one of the trays it contained bore an inscription which probably dates it around 575 B. C. and at any rate not later (cf. Karlgren, BMFEA 8, p. 59, vessel C36). It contains, on the one hand, bronzes in the Middle Chou style, and on the other a great many bronzes in early Huai style.

The Li-yü find (Shansi, see map, our fig. 1), equally of 1923, the best bronzes of which belong to various Western collections, has often been described in Western publications. Excellent photos are to be found in *Asiatische Kunst, Ausstellung Köln 1926*, by Salmony, in Umehara, *Seikwa* (pls. 164—172) and much more extensively in Umehara, *Senkoku* pls. 1—28 (illustrating 31 ritual vessels and many other objects). These publications have as a highly important complement the work *Hun yüan yi k'i t'u* 1936, by Shang Ch'eng-tsu, showing various objects that were not brought to Europe. The find was made in 1923 in Northern Shansi, and two swords carrying inscriptions in late pre-Han script (see Umehara, *Senkoku*) reveal the find as objects belonging to the state of Chao in the 3rd (or at the earliest the 4th) c. B. C.

No account of the Shou-chou (Shou-hien) find (Anhuei, see map, our fig. 1), made in 1933, has ever been published. A few of its most important bronzes have been illustrated and described in *Ch'u k'i t'u shi*, 1935, by Liu Tsie, and some others in *Shi er kia ki kin t'u lu*, 1935, by Shang Ch'eng-tsu. A few vessels are also given in Umehara, *Senkoku*, one Fu in the Chinese Exhibition, *Commemorative Catalogue* (1936). But it is deplorable that this enormous find has not been the object of a comprehensive catalogue. Liu tells us that the Anhwei Provincial Library alone possesses more than 700 objects from this find, and a great many others have been sold and scattered. The find is so much the more important as it can be fairly accurately dated. Quite a number of bronzes are inscribed and refer to the last Ch'u kings, one of them being Yu wang (237—228 B. C.); the objects must have been deposited between 228 and 222, when Ch'u was annihilated by Ts'in.

The fourth great find, that of Kin-ts'un near Lo-yang (Honan, see map, our fig. 1), is much better known to Western students through the publications of W. C. White (*White, Tombs*) and S. Umehara (*Umehara, Rakuyō*). Concerning the latter, cf. my article *Notes on a Kin-ts'un Album* (BMFEA 10, 1938). In regard to the Kin-ts'un find, White has rendered archaeology a signal service by his admirable efforts to bring together and classify the furniture of these tombs. To a certain extent, however, his task offered insurmountable difficulties. He could not himself visit the tombs, and he had to rely on the information vouchsafed by the art dealers for the fundamental question of the content of the graves. It was inevitable that some dealers, knowing that White wanted objects from the Kin-ts'un tombs, sometimes passed off objects from other sites as coming from Kin-ts'un. It is a great credit to the skill and acumen of this collector that he managed to bring together a set of objects the overwhelming majority of which can from intrinsic evidence be confidently accepted as being of Kin-ts'un provenience. But the very circumstances of their purchase make it impossible to prove that an isolated object in White's book was exhumed at Kin-ts'un. Thus, for instance,

White has 11 mirrors, and these are of 11 widely different types; it would be strange indeed if they all hailed from Kin-ts'un. The most, therefore, we can do — and that is already very much — is to state that when there is a series of objects stylistically cognate and coherent as a group in his Kin-ts'un finds, then there is a high degree of probability that they are of Kin-ts'un provenience. And this is extremely important, for the finds include many inscribed specimens which allow of an approximate dating. In my article just quoted (BMFEA 10) I have endeavoured to prove that the Kin-ts'un tombs extend over a period ca. 450—ca. 230 B. C.

Besides these four closed finds, which, though not scientifically excavated, still give us fairly valuable help, there are various inscribed objects from the whole of the period 650—0 B. C. which furnish *points d'appui*. For some of them I refer to my work already quoted (Yin and Chou in Chinese Bronzes, 1935); other inscribed objects shall be discussed here.

From what has been said so far it follows that the great fundamental question: when did the Hui style end? — did it close with the coming of the Han or did it live on for a century in the Western Han era? — must be taken up for a systematic and detailed investigation, and it can be solved only by a combined use of stylistic and epigraphic data.

In the study of the early periods of the Chinese bronze age there was a very extensive material at our disposal in the form of ritual vessels of the most varying shapes and with an extremely rich and varied décor. Our first task shall therefore be to ascertain whether the ritual vessels can help us in drawing a line of demarcation between Hui and Han and in finding a latest date for the duration of the Hui style. We find immediately that in one important respect there is an abrupt and remarkable break just at the advent of the Han dynasty, which makes the time ca. 200 B. C. a mile-stone dividing the two epochs.

There always existed, in all the early epochs, Yin, Yin-Chou, Middle Chou and Hui, certain ritual vessels that had the big surfaces of the body quite bare, altogether free from any décor, their beauty lying exclusively in their stately or elegant shape. But side by side with these bare vessels there were always, in all the said periods, a great number of vessels, indeed the great majority, which had a surface décor of one kind or another. In the Hui style, quite particularly, this décor was abundantly rich, covering the major part of the fields of the surface. From the very beginning of the Han era it became the mode to employ almost exclusively ritual vessels with bare bodies, the only ornament being a t'ao-t'ie mask of modest size as handle or in place of a handle, the large surfaces of the walls being quite blank. This does not of course mean that there are no bronze vessels of Han time with decorated surfaces; on the contrary, there are many examples, especially in the Hu flask class — a beautiful inlaid specimen with a Han inscription was published by Yetts in the Burlington Magazine 1931. But it is not certain that these were sacral vessels. If we go to the ritual vessel *par préférence* since time immemorial, the Ting tripod, we shall find the said new mode well documented.

Richly decorated Hui style Ting of proved pre-Han time (either belonging to the said closed finds, or carrying pre-Han inscriptions) are to be found e. g. in:

Sin cheng yi k'i, pl. 28 (Chou inscr.), pls. 33, 35, 36, 38, 40, 43—47, 50, 51, 53 (all Sin-cheng find).
 Umehara, Senkoku, pls. 1, 2, 3 a, b, 4 b (all Li-yü find), 119 (Kin-ts'un find), 125 (Shou-chou find).
 White, Tombs, pls. 93, 102 a, b (all Kin-ts'un find).
 Umehara, Senkoku pl. 27 (pre-Han inscr.).
 Shan chai yi k'i t'u lu pls. 36—39 (all pre-Han inscr.).
 Shan chai ki kin lu, k'uan 2, pls. 15, 51, 74 (all pre-Han inscr.).
 Cheng sung t'ang ki kin t'u, shang pl. 17 (pre-Han inscr.).
 Ch'ang an huo ku pien, k'uan 1, pl. 11 (pre-Han inscr.).
 Po ku t'u lu, k'uan 3, pl. 9 (pre-Han inscr.).

On the other hand, Ting with the body surfaces bare, inscribed in Han script and therefore of the Han era, are to be found e. g. in:

Pao yün lou yi k'i t'u lu pl. 35.
 Shuang kien ch'i ki kin t'u lu, hia, pl. 53.
 Meng wei ts'ao t'ang ki kin t'u, hia, pls. 9—11.
 Meng wei ts'ao t'ang ki kin t'u, sü pien, pl. 42.
 Cheng sung t'ang ki kin t'u, hia, pls. 4—9.
 Tsun ku chai so kien ki kin t'u, k'uan 4, pls. 2—7, 9—13 (pl. 1, decorated, is a mixtum compositum of later make).
 Chinesische Kunst, Ausstellung Köln 1926, pl. 40.
 Ch'ang an huo ku pien, k'uan 2, pls. 5—7, 9.
 Heng hien so kien so ts'ang ki kin lu, pls. 21, 105—107.
 Liang lei hien yi k'i t'u shi, k'uan 9, pl. 3.
 T'ao chai ki kin lu, k'uan 5, pls. 5, 6, 10, 13—22, 24, 25, 27.
 T'ao chai ki kin sü lu pls. 31, 32.
 Shan chai ki kin lu, 28th heft, pls. 15—19.
 Po ku t'u lu, k'uan 5, pls. 17, 19, 23, 26.
 Si Ts'ing sü kien, k'uan 3, pl. 35, k'uan 4, pl. 44.
 A Han Ting of the same bare category excavated in Lo-lang, see Sekino, Archaeological Researches on the Ancient Lo-lang district, plates part 1, fig. 274.

These 35 examples of the former category and 61 examples of the latter will suffice to illustrate the sudden and radical change that took place with the accession of the Han. The bare Ting tripods, which existed already in pre-Han time (as proved by some inscribed specimens) gained the upper hand to the absolute exclusion of the decorated Ting which was so common in pre-Han times. There is here quite strong and positive

proof, in the form of a long series of inscribed vessels, that the Han bronze style demanded ritual Ting tripods which appealed through their shape and the bare, smooth and shining principal surfaces of their bodies and lids. Indeed, I have not been able to trace a single good specimen of a Ting with a Han time inscription that had a decorated surface. There is consequently every reason to conclude that the Huai-style Ting tripods with an exuberant décor on the body were all made in pre-Han time, and that in this respect the Huai style did not survive into the Western Han dynasty.

This conclusion is important, for in this way, through the positive evidence of a great many inscribed Han tripods, we may determine a long series of uninscribed Ting tripods, which have the surfaces decorated in Huai style, as having been manufactured not in early Han time but in pre-Han times. And this is of paramount value for the study of pre-Han ornamentation. For a list of such uninscribed Ting vessels as with a probability bordering on certainty are of pre-Han make see p. 37 below.

There is another very striking phenomenon of an analogous kind to be observed. We know a great many big bells in grand Huai style, which can be determined to be of pre-Han make, either through having been found in the pre-Han closed finds cited above, or by pre-Han inscriptions. They are so numerous that a complete list would be tedious. We shall cite, from Western publications, only a few examples of Huai style bells with pre-Han inscriptions:

Our plates 2 and 5 below (three bells); BMFEA 8, pls. 57—58 (seven bells), Eumorphopoulos Cat. II, pl. 1; Tch'ou Tö-yi, *Bronzes antiques de la Chine*, pl. 23; White, *Tombs*, pls. 167—168 (two bells).

In the Chinese and Japanese albums there are scores of specimens of this kind.

The Huai style bells were, indeed, very often inscribed; there was a notable predilection for adorning their central fields with an inscription as part of the décor scheme. If these big bells in Huai style had survived beyond the political limit formed by the accession of the Han dynasty, so that the Huai style bells continued to be made in early Han time, we should expect to find a fair number of specimens on which the inscription fields were adorned with texts, not in pre-Han script but in early Han script¹. But there are, to my knowledge, no examples whatever of this. It would be very unreasonable to conclude that the Huai bells continued to be made in Han time, but that in this case the central fields, which are so suited for inscriptions, and traditionally the very place for such adornments, were always left empty. If we have many Huai style bells with pre-Han inscriptions, but no Huai style bells with Han inscriptions, the reason must be that the big bells in Huai style became obsolete at the end of the 3rd c. B. C. and were no longer cast in early Han time.

This conclusion, based exclusively on negative evidence, is not so binding as that concerning the Ting tripods, where we had series of direct and positive proofs of what

¹ The alternative that bell makers in early Han time continued to use the archaic script for bell inscriptions can be eliminated through the evidence of the Han Ting tripods: if the Han artists used Han script and not the archaic script on the Ting tripods, there is no reason why they should use the archaic script on bells.

the Han-time vessels looked like, yet it is sufficiently well founded to give an important suggestion: when we find uninscribed big bells in grand Huai style, it is highly probable that they were all cast in pre-Han time. The importance of this phenomenon for the study of pre-Han ornamentation is obvious. In any case we have no proofs whatever that in this important respect — the bells are indeed the greatest art products of the 7th—3rd centuries — the Huai style survived into early Han time.

If the Ting tripods and the big bells thus furnish us with valuable materials for drawing a chronological line of demarcation between Huai and Han bronze art — the time ca. 200 B. C. being here the milestone — they have the drawback that, whereas the material anterior to this dividing-line has a rich décor to serve as a basis for our studies, the material posterior to it tells us little: bare Ting tripods, with no surface décor to seize upon for analysis, and the total absence of the big bells. In order to arrive at more positive results we need some other class of materials which can furnish us with elaborate designs and telling details on both sides of the demarcation line. And just as in European archaeology, for instance, the fibulae, through their long existence, the great variety of their types and the vivid evolution in their history, have furnished an ideal material, so in China there are two groups of objects which may be expected to serve our purpose better than anything else: the dress hooks and the mirrors.

The dress hooks, varying widely in types and décor schemes, would supply us with an excellent material if we had the one or the other of the two necessary *points d'appui*: datable closed finds, or inscribed specimens. Unfortunately we have no datable closed finds from late Chou or Western Han time; and the dress hooks are very rarely inscribed. So we have to leave the dress hooks for the present and concentrate our endeavours upon the mirrors, which often bear inscriptions that furnish us with valuable chronological data. In the following pages I propose to make a detailed analysis of the early Chinese mirror categories, in order to try to establish a chronological system and thereby throw light on the great question of the latest time limit for the Huai style.

The classification of early Chinese mirrors is badly complicated by the already discussed lack of scientifically excavated closed finds. Curiously enough, neither the Sin-cheng, the Li-yü nor the Shou-chou finds seem to have contained any mirrors; this is particularly surprising in regard to Shou-chou. Moreover, as already stated, the few mirrors reported to come from the Kin-ts'un find are so heterogeneous that some of them give rise to serious misgivings.

This lack of reliable provenience data is doubly deplorable since we can clearly discern that the mirrors vary considerably according to different geographical centres. For in spite of the absence of reliable excavations, we are not quite without geographical *points d'appui*. In the case of a good many early mirrors we have at least the reports of the art dealers as to the region in which the mirror has been acquired. This kind of information is, of course, of very limited value; in fact, in regard to individual specimens

it has no value whatsoever. But when these provenience reports are pieced together and it transpires that there is a stylistically homogeneous group of which a score or more specimens are reported to come from one particular place, then the information gains considerable interest and importance.

Among Western investigators nobody has rendered sinology and archaeology such great services in tracing provenience data as Orvar Karlbeck. He was indeed the first discoverer of the pre-Han mirror. Lo Chen-yü's authoritative album *Ku king t'u lu* of 1916 did not contain a single pre-Han mirror. Nor — what is still more remarkable — did the great Sumitomo catalogue (*Senoku seishō, Kyōkan bu*) 1921. Already in 1922 Karlbeck brought the first pre-Han mirrors back to Sweden, and in 1926 he drew attention to their importance in the *China Journal of Science and Art*. In his subsequent travels in China, during which he has acquired a great many art treasures for Western collections, Karlbeck has always done his utmost to ascertain the provenience of the specimens he obtained. When, for instance, he personally bought a Chinese mirror in the very town of Shou-chou (Shou-hien), and the art dealer gave detailed information as to the place in the neighbourhood from which the mirror came, then we have as good information as it is possible to obtain at present, at least it is equally as good as that acquired by White regarding the Kin-ts'un tombs. The great majority of the provenience data registered below derive from Karlbeck, and I wish to emphasize here that his painstaking control, wherever he has been in a position to exercise it, has furthered our studies very considerably. As stated above, data of this kind can only be made use of in a very cautious way — regarding series of objects —, but Karlbeck's information is sufficiently comprehensive to allow of such a statistical treatment. A few provenience data have also been furnished by Swallow, by S. Umehara, and recently quite a number by Liang Shang-ch'un.

As we shall see presently, there are two principal centres from which pre-Han mirrors are known, the Shou-chou region and the Lo-yang region (see map, fig. 1). The former might equally well be called the Huai valley region, for it also includes, besides Shou-chou in An-huei, e. g. Ku-shi-hien in Eastern Honan¹. But I have avoided this term in order not to cause any confusion with our term 'the Huai style'. The Lo-yang region is the great centre in Northern Honan, but mirrors kindred to those from the vicinity of Lo-yang have also been found in other parts of Northern Honan, e. g. K'ai-feng and Cheng-chou, as we shall find below.

Shou-chou (Shou-hien) was one of the centres of the Ch'u kingdom during the last pre-Han centuries. There were many others. Recently some big graves have been plundered at Ch'ang-sha, and they seem to have yielded various kinds of objects analogous to those from Shou-chou. Amongst other things, there were found a number of mirrors, of several types, identical with those which we shall see were connected with Shou-

¹ When Liang Shang-ch'un in *Yen'ku* sometimes indicates 'Shou-hien' and sometimes 'Huai region', I have summed both up under the term 'Shou-chou region', taking 'Shou-chou region' in the sense of the Huai valley region generally.

chou¹. Ch'u was indeed a great and wealthy state, the most formidable rival of the finally victorious Ts'in. It had early laid the whole region between the Yang-tsi and the Huai river under its sway, and through a series of conquests made already before the period of the »Warring States« it had widened its territory so as to comprise not only Hupei, parts of Hunan and the major part of Anhuei, but also considerable tracts of southern, south-eastern and eastern Honan, e. g. the conquest of Teng (= Teng-chou-fu) in 678 B. C., Huang (= Kuang-chou-fu to the west of Ku-shi-hien) in 648, Ch'en (= Ch'en-chou-fu) in 481, Ts'ai (= Shang-ts'ai-hien, to the north of Ju-ning-fu) in 447. The Ch'u kings often moved their capital. Having resided in Ying (near King-chou-fu in central Hupei) in the 7th c. B. C., they moved to Yen-Ying (= Yi-ch'eng-hien of Siang-yang-fu, northern Hupei) in 504, and in 278 the residence was removed to Ying-Ch'en (= Ch'en-chou-fu in east-central Honan); in 253 they again moved to Kū-yang (= T'ai-ho-hien in north-western Anhuei), and 241—222 they resided in Ying (= Shou-chou, recently renamed Shou-hien, in central Anhuei, on the Huai-ho).

These changes of residence certainly did not mean that the Royal House took up its abode in an uninhabited spot and built a new city; that may have been the purport of moving the capital in hoary antiquity, when the Yin-dynasty kings frequently moved their capital. In late Chou time the feudal kingdoms of China were richly populated and full of other flourishing cities and towns besides the capitals of the reigning houses. An interesting glimpse of this is given by the Chan kuo ts'ê, which tells us (chapter Ts'i 6) that during the reign of Siang-wang of Ts'i (283—265 B. C.) »Yen attacked Ts'i and took more than 70 walled cities«. In the same way Ch'u must have been full of cities, and if the Ch'u kings in 241 moved to Shou-chou, it was because this was already a great and rich city, worthy of becoming a capital, a cultural centre with a dominating position on the important Huai river. We have therefore every reason to conclude that the Ch'u culture had flourished in Shou-chou, with connections both towards the south (the oldest Ch'u domains) and the west (east Honan, the new domains acquired by the conquests mentioned above). We must beware of believing that the Ch'u bronze art in the Shou-chou region was limited to the brief period when it was a capital (241—222); it must already have flourished there for centuries. In early Han time, the 2nd c. B. C., Shou-chou continued to be an important centre of a semi-independent character, most famous as the residence of »king« Liu An, *alias* the philosopher Huai-nan-tsi. After the death of this prince in 122 B. C. the territory was transformed into an ordinary commandery and lost its prominence.

The second great centre from which many mirrors are known to have come is the Lo-yang region, with the not very distant Cheng-chou and K'ai-feng regions. It is well known that the Royal Chou sat in the Lo-yang territory from 770 B. C. until Chou was finally destroyed in 249 B. C. But almost from the beginning of its Honan period (»Eastern Chou«) it lost its political power, governing directly only a small territory and retaining only its sacerdotal rôle and prestige. During the centuries that interest us

¹ See J. H. Cox, *An Exhibition of Chinese Antiques from Ch'ang-sha*, 1939; the book of Shang Ch'eng-tsu: *Ch'ang sha ku wu wen kien ki* does not contain any illustrations.

here it was the house of Hân (not to be confused with the Hân of the great Han dynasty) that was the protagonist in the neighbourhood of Lo-yang. The famous Kin-ts'un tombs, in the immediate vicinity of Royal Chou, were indeed, as we know, tombs of the Hân house. In the middle of the 6th c. B. C. its princes took up their residence in the present prefecture of Huai-k'ing of Honan, in the beginning of the 5th it was transferred to P'ing-yang-fu in southern Shansi, but half a century later it was again removed to the present Yü-chou in K'ai-feng-fu of Honan. It was not very much later that Hân, after the collapse of the great Tsin state, was created a feudal kingdom of the first rank, recognized by the Chou king in 403 B. C. Having in 375 destroyed the state of Cheng, which had ruled in the present Sin-cheng-hien of K'ai-feng-fu for four centuries, Hân transferred its capital there, and ruled the whole belt around the Huang-ho in Honan (the northernmost Honan, region of Chang-tê-fu, belonged to the state of Wei). Thus the geographical territory of the «Lo-yang group» of mirrors was essentially the Hân territory. Hân was destroyed by Ts'in in 230 B. C.

In grouping our mirrors below (categories A—L) I have not followed any chronological scheme, but I have brought them together into certain stylistic groups, arranging them in a series that is convenient for our discussion. The chronological sequence resulting from our investigation will then follow as a summary in our list of plates.

Let us start in our discussion, not from our category A, but from our category F, since this will give us some fundamentally important points of departure.

The stylistic features which bring mirrors F 1—48 together into a well-defined category will be described in detail later; let us mention here only some principal traits: the décor zone is filled with highly stylized dragons, of which some are executed in thread relief, some in flat relief; the great majority (the few exceptions will be discussed later) have all, or at least some, of the principal lines in the drawing of the animal itself or its appendices divided into two close parallel lines; the décor zone is crammed full of these animal figures, making it crowded and overloaded. A considerable sub-category has the TLV element, which we now know to have had a magical (astrological) purport¹. And many specimens bear inscriptions. It is this latter feature which we shall discuss first.

The inscriptions never contain any real dating, they are wishes for good luck and such-like (for the details see below). But they are nonetheless extremely important, for they are written in the famous Siao chuan «Small seal» script. It may seem bold to assert that short inscriptions like that of the mirror F 1, consisting only of a few words (11 characters), are really in Small seal. It is well known that the Small seal was only in part an innovation, and that many of its characters are really identical with the Ku wen characters of earlier periods. An inscription of 11 characters may there-

¹ Liu Fu, *Si Han shi tai ti ji kwei*, in *Kuo hŭe ki k'an* 1932; S. Kaplan, *On the origin of the TLV mirror*, RAA 1937; W. P. Yetts, *The Cull Chinese Bronzes*, 1939.

fore seem not to be decisive — its characters may happen to be, all of them, such as existed before the standardization of the script into the Small seal. But for this very reason it is of invaluable assistance to us that several mirrors in the category (F 7, 8, 19) have longer inscriptions. They allow of an identification of the script type beyond the possibility of doubt: it is the Small seal. Now, since the style features of the mirrors with the short inscriptions are such as to connect them indissolubly with these mirrors with long inscriptions — and with no other category —, and since the few characters they do bear are perfectly regular Small-seal characters, there can be no doubt whatever. The inscriptions in cat. F (the earliest category of Chinese mirrors that has any inscription at all) are in the script called the Small seal.

For it is a fact that we know very well what the Small seal looked like. It forms the basis of Hū Shen's famous dictionary *Shuo wen kie tsī* (100 A. D.), and we have means of verifying how faithfully he has preserved the original script. Already in 221 B. C. it was decided to unify the script, and Li Si, Chao Kao and Hu-mu King set about making handbooks to this end. The earlier Ts'in script was taken as the basis, a great many of its characters were accepted unaltered, others were simplified or modified, and, above all, the script was normalized, it was made more regular in the size of the characters and variants were expunged. This script was to become universal in the empire, and all other systems — late and degenerate versions of the older Ku-wen script — such as we know them from a great many 4th and 3rd century inscriptions (see Karlgren, *BMFEA* 10, p. 78) — were to be abolished and prohibited. The preparatory work, of course, took some years, and Hū Shen tells us directly that it was only through the great «burning of the books» in 213 B. C. that the reform became effective and that the Ku-wen scripts were really abolished. This statement of Hū's is so plausible in itself that it may be confidently accepted. The new script, the so-called Small seal, was already used in some inscriptions in the years following upon the initiative taken in 221 (Chavannes, *Mém. Hist.* II, p. 544—560), and above all in the text on the new standard weights and measures, based on edicts of 221 and 210 B. C. A great many specimens with this text are in existence, and reproductions are to be found in most of the great albums¹. We reproduce one specimen here in pl. 1 : 1 below. A comparison of our inscribed mirrors in cat. F with the *Shuo wen kie tsī*, the Ts'in inscriptions and the weights and measures text reveals at once that the mirror inscriptions are in the Small seal.

This, however, does not indicate any definite date, for there always remains the question: was not the script reform that was made effective in 213 merely a political move that made an already extant Ts'in script current in all parts of the realm? How far was the normalization a real simplification and how far was it an innovation? Could not the mirrors of cat. F with their Small seal inscriptions have already been cast before the unification of the script that was decided on in principle in 221 B. C. and made successful in 213 B. C.?

¹ E. g. Jung Keng, *Ts'in Han k'ien wen lu*, k'uan 1; *Cheng sung t'ang tsi ku yi wen*, k'uan 12; an example in *BMFEA* vol. 1, p. 33.

We possess an interesting document that might throw light on this problem: the Chu Ch'u wen «Imprecation against Ch'u» (see Chavannes, *Mém.*, Hist. II, p. 544), which was codified in an inscription from the time of king Huei-wen of Ts'in (337—311 B. C.). The original is long since lost, but there exist several reproductions from later times, and two of these have been conveniently edited by Jung Keng in *Ku shī k'o ling shī*, 1934. The two versions agree so closely as to allow us to form a very definite idea of what the original script was like. We reproduce here (pl. 1: 2) a page out of Jung Keng's book. A comparison of this Ts'in script of the Chu Ch'u wen from Huei-wen's time with the Small seal of Ts'in Shī huang ti's and Er shī huang ti's time reveals that though on certain points the difference is considerable, yet on the whole the Small seal must be said to be very closely akin to the Ts'in script of the late 4th century B. C., so closely indeed that it could not with absolute certainty be said that our mirror inscriptions in cat. F could *not* have been penned in the 4th—3rd c. B. C. I suppose that this is the reason why Umehara has boldly defined our category F as «antérieur à la dynastie des Han». And yet this conclusion must be said to be erroneous, and for a very decisive reason: the geographical and historical side of the question.

It would have been admissible if our cat. F of mirrors had been localized in Shensi, the domain of the Ts'in state. But, as we shall find from the detailed description of the group, this category is very decidedly localized in the Shou-chou region, which, as described above, in the 4th and 3rd centuries B. C. was an ancient stronghold and a cultural centre of the Ch'u state. It is absolutely out of the question that mirror inscriptions in clear Ts'in script could have been made in this region in the 4th and 3rd centuries B. C. anterior to the days of the script unification (221—213). Ch'u was the greatest adversary of the Ts'in state, and it maintained its own culture and its own script to the very last days of its existence. Fortunately we have positive proofs of this. / The inscribed vessels of the great Shou-chou find furnish us with ample testimony as to the nature of the Ch'u script as late as the period 241—222 B. C. And this is very important, for the inscribed bronzes in question are localized in this very Shou-chou to which the mirrors of cat. F belong. Thus the chain of evidence is closed without any chance of an error. We reproduce here (pl. 1: 3) some of the Shou-chou bronze inscriptions for purposes of comparison. Even a person who has no knowledge of Chinese script can realize at a glance that there is no similarity whatsoever between the Ch'u script of the late 3rd century on the one hand (pl. 1: 3), and the Ts'in script of Huei-wen's time (337—311) (pl. 1: 2), and the Ts'in emperors' time (221—210) (pl. 1: 1), i. e. the Small seal, on the other. Not only the ductus of the script, but its very composition and intrinsic nature are quite different. There cannot be a shadow of doubt as to the fundamental conclusion. In the Shou-chou region, the inscribed mirrors of cat. F cannot, in any circumstances whatsoever, have been cast anterior to the script unification in 213 B. C.

Is it possible, then, that Umehara may still be right in stating that they are «pre-Han» and that they date back to the years between 213 and 206, when the Han dynasty started (we ought rather to say 202, for it was not until 202 that the Han victory was

final all over the country)? Certainly not. Category F, as we shall see below, represents an entirely new departure in the history of the Chinese mirror, with several fundamental novelties of its own: the thread relief, the TLV arrangement, the insertion of inscriptions. Such a creation of entirely new artistic conceptions and a new technique is possible only in a time of cultural and political prosperity, not in a period of distress and anarchy. Now, the great Ts'in Shih huang ti died three years after the famous book-burning in 213 B. C., and immediately rebellion and anarchy broke out. The years between 210 and 202 were a period of the worst civil wars that China has ever had. That there could have flourished in Shou-chou, in the heart of China, a bronze art with important innovations and new creations during these dark years is entirely out of question. When once we realize that our cat. F has to be dated after 213 B. C., we may immediately follow this up and state that it must be dated after 202, when the Han dynasty was finally victorious and the country could breathe in peace after the disastrous wars.

If, then, our cat. F cannot be earlier than the 2nd century B. C., it remains for us to examine whether it cannot be even later, say the 1st c. B. C. In order to determine this we have to start at another end and examine our category L, the «Wang Mang mirrors».

The earliest Chinese mirrors that can be exactly dated within the limit of a very few years are those connected with the usurper Wang Mang (9—23 A. D.). There are certain mirrors which by their inscriptions reveal that they were made during his reign. We have recorded 6 examples in our cat. L below (pls. 79, 80). The inscription on L 1 runs: «The Shang-fang has made the mirror, it is greatly without blemish; Sin (the «New» dynasty) has good copper, it comes from Tan-yang», etc. Sin was the dynastic name chosen by Wang Mang. The inscription on L 5 and 6 reads: «Sin (the New dynasty) has erected a Pi-yung (Imperial college) and built a Ming-t'ang (Bright hall, ceremonial hall); may you be illustrious among promoted scholars» etc. L 2 has the reading: «Mr. Wang has made the mirror; the Barbarians of the four directions have submitted; much I congratulate the Sin house (the New dynasty), the people have got rest; the Hu slaves (i. e. tribes of the North) are destroyed and exterminated, the empire is restored», etc. On other mirrors of the same class, e. g. Ku king t'u lu, chung 23 b, the inscription similarly runs: «Mr. Wang has made the mirror; the Barbarians of the four directions have submitted» etc. Many mirrors of the same group with Wang Mang inscriptions may be found, e. g. in Tomioka, Kankyō no kenkyū pl. 41, pl. 42 (two mirrors), Swallow pl. 5, Yetts, The Cull Chinese Bronzes pl. 31 etc.

These Wang Mang mirrors, however, form only a small part of a very comprehensive category. In my cat. L below I have selected only 6 specimens to serve as examples of the class; but the category (Wang Mang mirrors and Han mirrors of the same class) is represented by a great many specimens preserved in various collections¹. This large category has obvious points of connection with category F which we have just discussed at length — the TLV arrangement, the animals in thread relief, the placing of the in-

¹ Specimens of it are found e. g. in: Umehara, Seikwa 4, pls. 58—71, Koop, pls. 71, 72, Sirén II, pl. 66, Eumorfopoulos II, pls. 9—11, Tomioka pls. 3—9.

scription — but the difference is still more striking. In cat. F we had very thin mirrors with a very small, mostly fluted knob (as we shall see, these are features common to all early mirrors); here in cat. L we find substantial mirrors with a particularly thick and heavy rim, and a big, hemi-spherical knob — both features common to groups of mirrors datable in Eastern Han time by their inscriptions or by the Korean finds. In cat. F we had a concave rim, ending in an almost sharp edge. Here we find a broad thick rim with elaborate scrolls as filling décor, and inside this a band of triangles with the apices turned outwards, something entirely new. Moreover, the legends in cat. L are in a script form that is much more developed, in the direction of the modern *k'ie shu*, than the Small seal of cat. F (we shall revert to this script question presently). We can realize at once that this cat. L of mirrors represents a much more advanced, i. e. a later stage than the F category.

As stated just now, the category of mirrors to which our Wang Mang mirrors below (L 1—6) belong is richly represented, in a great many variants, though they all stand close together in a stylistically homogeneous group. It must have flourished throughout the 1st c. A. D., for we find good specimens of it in the Korean Lo-lang finds (e. g. Sekino, *Archaeological Researches*, Plates part 2, figs. 1295—97 etc.). But the question that is most important to us here is this: did this category originate with Wang Mang's reign (9—23 A. D.) and then continue for a century, thus just filling the 1st c. A. D., or did it start earlier, so that the Wang Mang mirrors are to be placed right in the middle of the life-time of this category?

The same question may be formulated in an analogous way if we refer to the mirror inscriptions. In the big cat. L, besides mirrors bearing the formula: »Sin (the New dynasty) has good copper, it comes from Tan-yang» etc., there are many mirrors having the formula: »Han (the Han dynasty) has good copper, it comes from Tan-yang» etc. The question, then, is this: was the formula »Sin has good copper» the primary version, imitated and altered into »Han has good copper» after the fall of Wang Mang and the restoration of the Han house? Or was the formula »Han has good copper» already current and well established before the usurpation of Wang Mang, and was it imitated and altered into »Sin has good copper» during the years 9—23 A. D.? Briefly, did cat. L start with the period 9—23 A. D. or earlier?

Let us first of all point out the great improbability of the former alternative. The Han dynasty, after a period of almost unequalled success and prosperity during the reigns of Wu-ti (140—87 B. C.) and Chao-ti (86—74 B. C.), rapidly declined during the later part of the 1st c. B. C. The decadence and corruption, entailing economic and social crises, grew worse and worse, and this formed the background to the anarchy that led up to Wang Mang's usurpation. It is hardly likely that the period of usurpation (9—23 A. D.), the final crisis after some decades of political weakness and cultural decadence, should be the birth-time of a new and in many respects revolutionary departure in the bronze art as represented by the magnificent mirrors of category L. It is much more likely, for this reason, that the new Han style, as expressed in the L mirrors, had originated long before Wang Mang's time, and that the formula »Han has

good copper» was simply altered to «Sin has good copper» by the artists working for Wang Mang.

A confirmation of this conclusion is furnished by the legends of some Wang Mang mirrors. We have seen above that they run: «... the Barbarians of the four directions have submitted; much I congratulate the Sin house (the New dynasty); the people have got rest; the Hu slaves (tribes of the North) are destroyed ...». Here, as in the «Sin (: Han) has good copper» group, there are other mirrors on which the legend is slightly different: «... the Barbarians of the four directions have submitted; much I congratulate *kuo kia* the Imperial house; the people have got rest; the Hu slaves are destroyed» etc. (thus, e. g., the mirror Ku king t'u lu, chung 22 b). There cannot be the slightest doubt that this formula suits the conditions in Wu-ti's and Chao-ti's time exceedingly well. It was, indeed, the greatest exploits of these reigns to vanquish the Hiung-nu to the North and bring victorious Chinese armies right through central Asia, building forts along the silk caravan routes, and similarly to strengthen China's position against the «Barbarians» of the South, thus bringing the «Barbarians of the four directions to submission». This was the glorious epoch when China, leaving behind the era of exclusively internal politics, began to look towards wider horizons and laid the foundations of its realm as an Asiatic great power.

And what do we find at the time of Wang Mang? The great creation of Wu-ti's and Chao-ti's generals had been neglected, the monumental empire building had crumbled, to be restored only late in the 1st c. A. D., China was impotent and helpless against the Barbarians of the North; in Wang Mang's period China's foreign policy was at its lowest ebb. To *invent*, during this time, a laudatory formula such as the one just quoted, bragging about the victory over the «Barbarians of the four directions», would not only have been meaningless, it would have been tantamount to libellous irony and an insult, risking the head of the clumsy artist. That this formula could be used at all on the Wang Mang mirrors shows clearly that it was quite conventionally and rather thoughtlessly taken over from already existing mirrors of older date, where it made good sense, the *kuo kia* «Imperial house» of those earlier mirrors being simply changed into *Sin kia* «the New house».

It is obvious that this type of mirrors with the legend *sī yi fu* «the Barbarians of the four directions have submitted» and *hu lu t'ien mie* «the Hu slaves are destroyed» had its origin in the period of the first great Chinese victories in Northern and Central Asia, i. e. approximately the period 100—80 B. C. I conclude that the Wang Mang mirrors were cast in the very middle of the life-time of the L-category mirrors, and that this category may confidently be dated ca. 100 B. C.—ca. 100 A. D.

The conclusion that category L fills the 1st c. B. C. cannot, however, be definitely accepted unless we ascertain that it is epigraphically admissible. We must examine the script type of its inscriptions, and this brings us back to the question of the Small seal. The Small seal was indeed subject to rapid change and modification almost from the moment of its birth and its universal application in 213 B. C. The ya-men scribes soon modified it into a quicker ductus known as the *li-shu*, and very soon we find

it strongly changing in the direction of the *k'ie-shu*, the present model script, the «copy-book» writing essentially identical with the present printed graphs. This *k'ie-shu* was entirely carried through only in Eastern Han time, but its first symptoms are observable much earlier. If we examine our mirror L 1 of Wang Mang's time (pl. 79), we find that it is far more closely akin to the *k'ie-shu* than to the Small seal; observe, for instance, the radicals in *yin* 'dark' and *yang* 'bright' (rad. 170), in *shang* 'damage' and *pao* 'preserve' (rad. 9), in *shun* 'accord with' (rad. 181); the phonetic in *ts'ing* 'pure', the whole of the characters *chu* 'red', *pei* 'complete' and *kü* 'prepare, ready'—these are all completely *k'ie-shu*, far advanced from the Small seal; on the other hand, characters like *pu* 'not', *hüan* 'black', *sun* 'grandson' etc. are still clearly Small seal, not at all modified in the direction of the *k'ie-shu*.

It was pointed out above that category L (Han and Wang Mang mirrors) is represented by a great many mirrors, and it is important to observe that they all have this in common: when they are inscribed, the script is of this type, which we may call strongly modified or «modernized script», i. e. a mixture of retained Small seal forms and more or less fully modernized, *k'ie-shu*-like graphs.

The question then arises: can we ascertain that such modernized script was possible throughout the 1st c. B. C.? In order to do this we have to turn to other categories of bronzes with dated inscriptions. The custom of using *nien-hao*, reign denominations, arose in 140 B. C. (Kien-yüan), and from that time onwards there is a fair number of such inscriptions dated by *nien-hao*. Jung Keng in his *Ts'in Han kin wen lu* (1931) has collected a great many Han time inscriptions, and from this very convenient handbook I draw the following dated examples (skipping, of course, all inscriptions which Jung Keng thinks are spurious or suspect); and I add a few more from other sources.

- 128 B. C. Kien chao kung Ting (Tsun ku chai so
kien ki kin t'u 3: 50)..... slightly modified Small seal.
- 126 B. C. Lung yüan kung Ting (Jung Keng) 1: 1a,
Cheng sung t'ang tsi ku yi wen, pu yi hia 7b)... Small seal.
- 109 B. C. Lo yang wu k'u Chung (Jung Keng 2: 1a,
T'ao chai ki kin lu 6: 1)..... strongly modernized script.
- 103 B. C. T'ai tang kung Hu (Jung Keng 2: 25a).. Small seal.
- 101 B. C. Ku k'ou Ting (Jung Keng 1: 1b, Ch'angan
huo ku pien 2: 5)..... strongly modernized script.
- 85 B. C. K'u kung hing chu Teng (Jung Keng
3: 16a, K'i ku shī ki kin wen shu 11: 24)..... strongly modernized script.
- 67 B. C. Yang Ting (Jung Keng 1: 2a, K'i ku
11: 7)..... strongly modernized script.
- 65 B. C. Yüan k'ang yen tsu Teng (Jung Keng
3: 17a, Cheng sung 13: 24)..... strongly modernized script.
- 65 B. C. T'o ts'üan Hüan (Jung Keng 4: 1a,
Ch'ang an 2: 24)..... Small seal.

- 65 B. C. T'ang kuan Ting (Cheng sung, sū hia 25a)..... strongly modernized script.
- 65 B. C. Lien si kung Lien (Shan chai ki kin t'u lu, heft 28, p. 33)..... slightly modified script.
- 63 B. C. Chao t'ai kung Pien (Jung Keng 4: 16b, Cheng sung 15: 4)..... strongly modernized script.
- 61 B. C. Ch'ang an hia ling kung Teng (Jung Keng 3: 18a, Cheng sung 13: 22)..... Small seal.
- 58 B. C. Ch'eng shan kung k'ü Sheng (Jung Keng 4: 9a)..... Small seal.
- 57 B. C. Ch'eng an kung Tou (Shan chai heft 28, p. 31)..... Small seal.
- 57 B. C. Wu feng wei Sheng (Jung Keng 4: 9a, T'ao chai 6: 60)..... strongly modernized script.
- 52 B. C. Ch'ang an kung Ting (Jung Keng 1: 2b, K'i ku 11: 9)..... strongly modernized script.
- 50 B. C. Ch'i yang kung hing Teng (Jung Keng 3: 20a, Ch'ang an 2: 10)..... Small seal.
- 49 B. C. T'ai tang kung Teng (Tsun ku chai 4: 23)..... strongly modernized script.
- 46 B. C. Shang lin Liang (Jung Keng 3: 11a)... strongly modernized script.
- 44 B. C. King wu chu kia Yao (Jung Keng 4: 13b, Cheng sung 15: 6)..... strongly modernized script.
- 39 B. C. Po yi kia Ting (Jung Keng 1: 3a, Cheng sung 13: 13)..... strongly modernized script.
- 38 B. C. Lin kuang kung hing Teng (Jung Keng 3: 20b, Cheng sung 13: 23)..... slightly modified script.
- 36 B. C. Kien chao hing Teng (Jung Keng 3: 21a, T'ao chai 6: 52)..... Small seal.
- 36 B. C. Kien chao yen tsu Teng (Jung Keng 3: 21a, K'i ku 11: 21)..... slightly modified script.
- 33 B. C. Chung kung yen tsu Teng (Jung Keng 3: 21b, K'ia chai tsi ku lu 26: 24)..... slightly modified script.
- 33 B. C. King ning yen tsu Teng (Jung Keng 3: 22b, K'ia chai 26: 24)..... slightly modified script.
- 33 B. C. Kuei kung yen tsu Teng (Jung Keng 3: 22a, Cheng sung 13: 25)..... slightly modified script.
- 31 B. C. Sin tu shī kuan hing Teng (Jung Keng 3: 23a)..... strongly modernized script.
- 31 B. C. Chung shang fang tsiao Sheng (Jung Keng 4: 8b, T'ao chai 6: 61)..... Small seal.

- 31 B. C. Kien shī er nien tsiao Hu (Shan chai, heft 28, p. 30) Small seal.
- 27 B. C. Wan nien hien kuan Tou (Jung Keng 3: 5b) strongly modernized script.
- 24 B. C. Shang lin Ting (Jung Keng 1: 3a, Cheng sung, pu yi hia 7a) strongly modernized script.
- 23 B. C. Shang lin Ting (Jung Keng 1: 4a, K'ia chai 26: 3) strongly modernized script.
- 23 B. C. Shang lin Ting (Jung Keng 1: 3b, Cheng sung 13: 14) strongly modernized script.
- 23 B. C. Lien si kung Mou (Shan chai, heft 28, p. 31) slightly modified script.
- 22 B. C. Lung yüan kung Lu (Shan chai, heft 28, p. 51) slightly modified script.
- 15 B. C. Yung shī sheng yü Ting (Jung Keng 1: 4b, Liang lei hien yi k'i t'u shī 9: 4) strongly modernized script.
- 14 B. C. Yung shī kao Teng (Jung Keng 3: 23b, Cheng sung 13: 24) strongly modernized script.
- 14 B. C. Yung shī sheng yü Ting (Jung Keng 5a, K'ia chai 26: 2) strongly modernized script.
- 12 B. C. Fu p'ing hou Tsiao (Jung Keng 4: 8a) Small seal.
- 12 B. C. Ch'eng an Hüan (Jung Keng 4: 2a, Kiu ku 11: 17) Small seal.
- 11 B. C. Lin yü kung kao Teng (Jung Keng 3: 24a) strongly modernized script.
- 11 B. C. Lin yü kung kao Teng (Jung Keng 3: 23b) strongly modernized script.
- 11 B. C. Yüan yen Fang (Jung Keng 2: 20a, K'ia chai 25: 10) strongly modernized script.
- 11 B. C. Shou ch'eng shī Ting (Jung Keng 1: 5b) slightly modified script.
- 10 B. C. Yüan yen sheng yü Ting (Jung Keng 1: 6b) strongly modernized script.
- 10 B. C. Yüan yen sheng yü Ting (Jung Keng 1: 6b) strongly modernized script.
- 9 B. C. Lin yü kung kao Teng (Jung Keng 3: 24b, Ch'ang an 2: 11) strongly modernized script.
- 9 B. C. Wan suei kung kao Teng (Jung Keng 3: 25a, K'ia chai 26: 24) strongly modernized script.
- 9 B. C. Yen shou kung kao Teng (Jung Keng 3: 25a, Cheng sung 13: 25) strongly modernized script.
- 9 B. C. Lin yü kung kao Teng (Jung Keng 3: 24b, K'ia chai 26: 25) strongly modernized script.

- 8 B. C. Suei ho Hün (Jung Keng 4: 2b, T'ao
chai 6: 19)..... strongly modernized script.
- 8 B. C. Suei ho yen tsu Teng (Jung Keng 3: 25b,
K'ia chai 26: 23)..... strongly modernized script.
- 5 B. C. Kia ch'iao yao Chung (Jung Keng 3: 37b,
Cheng sung 15: 1)..... strongly modernized script.
- 5 B. C. Kien p'ing Fang (Jung Keng 2: 20b,
Heng hien 110)..... strongly modernized script.
- 3 B. C. Nan ling Chung (Jung Keng 2: 1b, T'ao
chai 6: 4)..... Small seal.

This table is quite instructive. It tells us first, in a general way, that the Small seal, either pure Small seal or slightly modified, lived on throughout the whole of the 1st century B. C. We may add that we also frequently come across Small seal inscriptions later, during the 1st c. A. D. On the other hand, it gives us the extremely valuable information that the strongly modernized script, which is so far developed that it is very closely akin to the *k'ie-shu* (the normal script that became entirely victorious during the Eastern Han and has remained the standard script to this day), was created already in the later part of the 2nd c. B. C. This «modernized script», which might be called «half-modern script» or «proto-*k'ie-shu*», is quite the same as that employed on the mirrors of our category L, and even the earliest dated example (that of 109 B. C. in our table above) is just as advanced as that of the Wang Mang mirrors.

But let us examine the materials a little more closely. We have 18 inscriptions from the period 128—50 B. C., and 39 from the period 49—3 B. C. The Small seal (pure or slightly modified) occurs on 9 specimens out of the 18 of the first section, i. e. one-half of the examples; it occurs on 14 specimens out of the 39 in the second section, i. e. just over one-third of the examples. This illustrates, to some extent, the decreasing use of the Small seal.

The modernized script (half-modern style, proto-*k'ie-shu*) occurs on 9 specimens out of the 18 of the first section, i. e. one-half of the examples; it occurs on 25 specimens out of the 39 of the second section, i. e. a little less than two-thirds of the examples. This testifies to the growing use of the modernized script.

Now, statistics are dangerous when they are based on so limited a material as a little less than three score dated inscriptions, and we must not exaggerate the importance of the conclusions drawn from them. But the salient point, the one of prime importance to us here, is that the modernized script, such as we find it on the L-category mirrors, has a quite predominant position, as against the Small seal, during the period 109—3 B. C., and we find it fully developed already in the latter half of the 2nd c. B. C.

The fact that the L category mirrors always have the modernized script and never the Small seal might at first glance tempt one to conclude that category L has to be

dated late, at a time when the Small seal had died out entirely. But this is an impossible conclusion, as will easily be realized. For as we have just seen, the Small seal continued to be used occasionally throughout the 1st c. A. D., and yet we have L mirrors datable in the Wang Mang period (9—23 A. D.). The explanation of the lack of Small seal on the L-category mirrors is quite different. The Small seal as a current and regular everyday script, a natural and living continuation of the script of Ts'in Shī huang ti's time (213 B. C.), had a very short life-time. After less than a century it was ousted by the modernized script in everyday writing, and when it was still employed occasionally, during the later part of the 1st c. B. C. and in the 1st c. A. D., it was as an archaizing, artistic feature. The makers of the L-category mirrors evidently did not take to this artistic trick but penned their inscriptions in the ordinary, modernized script that was already victorious in practical life, and therefore we do not find the Small seal on these mirrors.

The result of this epigraphical investigation is to confirm our earlier conclusion: we are perfectly justified in admitting that the L-category mirrors may have started as early as the era of the great conquests ca. 100—ca. 80 B. C. (*sī yi fu* «the Barbarians of the four directions have submitted»). On the other hand it emphasizes that we can hardly venture to place it even further back in time: we should risk coming back to a period when the Small seal cannot have been completely ousted from the ordinary writing usage, when it was still a living script; in such a case its total absence from the L mirrors would be hard to explain. Epigraphy therefore confirms our conclusion that the L-category mirrors must be dated roughly ca. 100 B. C.—ca. 100 A. D.

After this long discussion of the mirrors of cat. L we revert to our cat. F. It was already determined as being not pre-Han, as Umehara thinks, but posterior to 202 B. C. It remains to draw its final time limit. This is now feasible with the aid of our results concerning cat. L. As already pointed out, the two categories have much in common (thread relief, TLV arrangement, decoratively placed inscriptions), but there is still more that separates them: the F mirrors, like all early mirrors, are thin and have a small, mostly fluted knob; their rim, like that of many early mirror groups, is concave and ends in a sharp ridge. The L mirror, like many datable later types, is thick and heavy and has a big, hemispherical, smooth knob and a broad, thick, mostly geometrically decorated rim. If we now add that the inscription of the F mirror was always in Small seal, whereas that of the L mirror was always in modernized script, the conclusion is obvious: the F mirror is anterior to the L mirror, and therefore has to be placed between ca. 200 and ca. 100 B. C. This tallies well with the fact already adduced that cat. F is localized in the Shou-chou region, which was a semi-independent cultural centre down to 122 B. C. The F mirror was most probably a particular artistic type representative of this cultural centre.

One objection might be made to this conclusion. The very fact that the F category is so particularly bound up with Shou-chou, whereas the L category was obviously a product of the Imperial capital region (as attested by the inscriptions), might suggest

that the two groups may have overlapped for some time, the Shou-ch'ou centre continuing to produce mirrors of an earlier type (thin, with small knob etc.) and with Small seal inscriptions at a time when the artists in the Imperial capital had already started upon new lines, casting heavy mirrors with big, hemispherical knob, and with inscriptions in modernized script. There is, of course, some uncertainty on this point: the latest and most degenerate mirrors of category F may have continued not only towards the end of the 2nd c. B. C. but also into the beginning of the 1st c. B. C. But on the whole it may be assumed that the provincial isolationism was far less strong in Imperial Han time than in the pre-Han feudal epoch. Communications were freer and more frequent, reciprocal influences stronger, and the possibility of keeping up a belated form of an earlier type, uninfluenced from a vigorous artistic centre in the capital, was on the whole small. We are, generally speaking, quite safe in dating the F category, as a whole, in the period ca. 200—ca. 100 B. C. We have thus confirmed, through a series of tangible epigraphical and historical arguments, the dating of the category upheld by, among others, Visser and Karlbeck, as against that of Umehara and the editors of *The Chinese Exhibition, Commemorative Catalogue* 1936.

From cat. F, now established as a big and important category of early Han time, we pass on to categories H, J and K. The style characteristics of these classes shall be discussed in detail later on. What interests us here is the fact that they are often inscribed. An examination of the inscriptions will show that whereas some specimens (e. g. H 6, K 14) have pure Small seal, the majority have what may be called «stylized Small seal»; the graphs are often made square, and there is a rich variation of larger or smaller fanciful modifications, which make them artistically attractive. This kind of stylized Small seal is, in a way, timeless. As an artistic feature it has been used throughout many centuries, and, for instance, on mirrors of Eastern Han time (and even on some L-category mirrors) it is not uncommon to find a principal inscription in modernized script and then, in the centre, the 12 cyclical characters in stylized Small seal. The inscriptions alone can therefore only tell us that these mirror categories H, J and K are of Han time, not of pre-Han date, but they cannot furnish any precise information as to their place within the Han era.

The 2nd century B. C., however, is eloquently indicated by that telling detail: the knob. We find here the same small, mostly fluted knob as that in cat. F (2nd c. B. C.), as against the big, hemispherical, smooth knob of cat. L (1st c. B. C.), and we may therefore safely assume that our categories H, J and K are of early Han date. Indeed a comparison of categories F and L suggests that the time ca. 100 B. C. was the line of demarcation between small, fluted knobs and big, hemispherical knobs. I have added, as examples, a few mirrors (K 11, 12, 13) which throw an interesting light on this point. With their bigger and round knobs they form a direct 1st-century continuation of the 2nd-century mirrors with small, sometimes fluted knobs, which are recorded as K 5—10. This more advanced class of mirrors brings us over to a large category belonging to the 1st c. B. C. and illustrated e. g. by Umehara in *Seikwa* 4, pls. 49—52; but I have not embodied the latter in my illustrations nor taken it up

for investigation here, because it has no bearing on our principal theme, the limit between Huai and Han. I hope to revert to these Middle Han mirrors on another occasion.

Thanks to epigraphical data we have established, in the first place, several rich and varied categories of mirrors which may be dated with certainty in early Han time, the 2nd c. B. C. Our next step shall be to use these categories as a point of departure, and before we enter upon a detailed examination of the various other categories, we shall discuss some general décor features.

I. *Volute-and-triangle.*

One of the most typical features of the Huai style, which was particularly studied by J. G. Andersson in his article *The Goldsmith in Ancient China* (BMFEA 7, 1935), is what he called the «volute-and-triangle» (fig. 2a). The term is perhaps not quite happy, for sometimes it is not so much a triangle as an open angle, as shown by the second variant here illustrated (fig. 2b). Yet I think it best not to introduce a new term.

This décor element has a long history, its pedigree reaches back into Yin time. Its prototype forms part of the Yin B style element which I have called «eyed band with diagonals», and is illustrated by a Li tripod in the Yin B style BMFEA 9 (1937) pl. 34, and a Kuei belonging to the same style depicted *ibid.* pl. 37. In its fully developed form we find the volute-and-triangle quite frequently in the Middle Chou style, especially on the Chung bells. Such a bell,

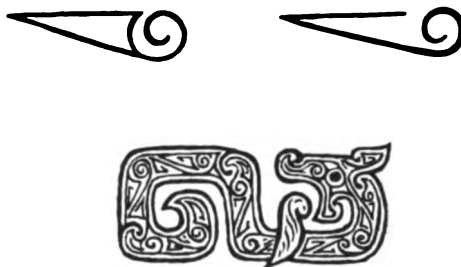


Fig. 2. a—c.



Fig. 3.

with this décor element filling the horizontal bands on the big surface of the bell, between the «nipples», is reproduced in BMFEA 8 (1936) pl. 48 — this bell is of the Ki state which was extinguished in 690 B. C. (see *op. cit.* p. 62). Another striking and

beautiful example is a Sü in Sung chai ki kin sü lu pl. 45, in good Middle Chou style and with a Middle Chou inscription. From the Middle Chou style the volute-and-triangle was taken over by the Huai style, where it plays an exceedingly prominent part, both as a filling for background fields, for various animals' bodies or decorative bands, and as the principal pattern.



Fig. 4.

In the first function we meet it, e. g., on a bronze vase of the Kin-ts'un find (White, Tombs pl. 106), where it serves as a background filling, with some deer as principal pattern (our fig. 3). In the second function we have it on a whole series of Li-yü vessels (Umehara Seikwa or Senkoku), where it covers the bodies of dragons (our fig. 2c); and on the famous Shou-chou Ting, of Yu-wang's time, 237—228 B. C. (Umehara, Senkoku pl. 125), where it fills some decorative bands (fig. 4). As principal pattern on surfaces we have it on the handles of the Piao bells (550 B. C., see BMFEA 6, p. 137 and 9, p. 104), and on inlaid finials of the Kin-ts'un find.

II. Granulation filling.

The granulation filling is a Huai-style innovation, due to influence from the Ordos art (see Karlgren, BMFEA 9, p. 100). The earliest dated example that I know of is a bell (Huai mi shan fang ki kin t'u, hia p. 2) with an inscription bearing the name of prince K'eng of Chu, who died in 556 B. C.; it has a small lower field with granulation filling. As a filling for parts of animals' bodies it occurs in the Kin-ts'un finds (White, Tombs pl. 18, Umehara, Rakuyō pls. 48, 70), and on the Li-yü bronzes (Umehara, Senkoku pls. 1, 14, 21, 23, 26, 27). As a background filling, covering the whole surface of a Ting, against which dragons stand out as principal pattern, we meet it on a Ting with a pre-Han inscription in Shan chai ki kin lu 2: 6.

III. Granulation line as filling for a band.

A special application of the granulation filling just discussed is the granulation line as filling for a band. This, again, is an idea of the Ordos animal style, borrowed by the Huai style (see Karlgren, BMFEA 9, p. 100, Andersson, BMFEA 4, pl. 11: 4, Salmony, Sino-Siberian Art, pl. 24: 5), and this décor element, as we shall see, is of particular importance to us in the present investigation. We find it on a bell of the Sumitomo collection (our Pl. 2), where it serves both as a stylized dragon body and as an outer border of a whorl circle; the bell bears a pre-Han inscription. Another highly interesting example is furnished by a beautiful Kuei (Shī er kia ki kin t'u lu 12: 3—4). This Kuei has a décor on the vessel which is very closely akin to the Middle Chou style, though the technique is Huai-icized, and the script of its inscription determines it as being not later than the 7—6th c. B. C. On the foot of the Kuei there is

a pattern shown in a rubbing in our fig. 5a. It is a highly stylized dragon shape, the principal features of which are illustrated in our fig. 5b. All the border lines of this dragon are formed of such granulation-filled bands as those discussed here.

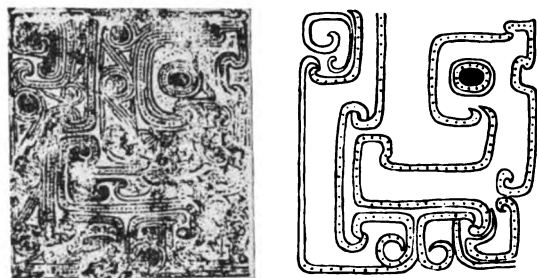


Fig. 5 a—b.

IV. Interlocked T's.

This is one of the elements of the Yin art which have been revived and used in the Huai style. In the B style of Yin it is extremely frequent, and also in its successor, the Yin-Chou style. There are indeed scores of examples in the bronze albums¹. In the Huai style we can ascertain its pre-Han existence among other things through the Kin-ts'un finds. It occurs there on such different kinds of objects that there can be no doubt of the correctness of its occurrence in the true finds of these tombs. In White, Tombs pl. 10, we find it on a wheel axle cap; on his pl. 92 we meet it on a Tou vessel, both on the lid and on the body; on his plate 93 we find it again on a Ting tripod. The photos in these cases are too poor to permit of a new reproduction, and we therefore illustrate instead (pl. 4: 4) a quite similar wheel axle cap belonging to the MFEA, which shows the interlocked T's against a background of *lei-wen*, this latter a clearly pre-Han element. Another good example is the Ting in Umehara, Senkoku pl. 42, Yamanaka collection (a decorated and hence pre-Han Ting), with a beautiful and regular interlocked T's pattern.

V. Zigzag lozenge.

The interlocked T's have given rise to a very peculiar décor element of great interest to our investigation. The key specimen, which reveals the mode of birth of this element, is a beautiful Ting tripod in the Staatl. Museum of Berlin (O. Kümmel, *Chinesische Bronzen* 1928, pl. 12), which we reproduce in our pl. 3. As a consequence of our deductions above: that Ting tripods with decorated surfaces are regularly pre-Han (as against the bare Ting tripods of Han time) we may safely date this vessel in pre-Han time. Moreover, the principal pattern stands out against a background of *lei-wen*, which latter is a pre-Han element. A detail of its décor is given in our fig. 6 and a

¹ E.g. BMFEA 8, pls. 11, 16, BMFEA 9, pls. 28, 42, 45, 47, 52.

regular interlocked T's pattern for comparison. What has happened here is very simple: the horizontal top-stroke of the T, instead of running in straight and forming at the same time the vertical stem of the next T, as in the orthodox interlocked T's pattern, has been broken into an angle. This has the effect of producing a funda-

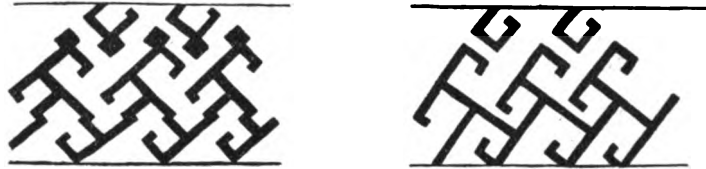


Fig. 6.

mental zigzag figure like our fig. 7a, b. How much this new play of lines appealed to the Chinese artist is shown by a detail on the Berlin Ting: the corners in some places are adorned by the addition of small squares (our fig. 7c, d) which are not at all derivable from the primary interlocked T's, but are extra embellishments in the spirit of the zigzag figure born by the breaking of the T line!



Fig. 7 a—e.

Since in the Berlin Ting pattern the zigzag figures both occur with the apex turned upwards (fig. 7a, d) and with the apex turned downwards (fig. 7b, c), it was but natural to create a new pattern by a combination of the two: fig. 8a, which led to the complete zigzag lozenge, fig. 8b, of which fig. 7a, b is one half, and fig. 7c, d is, so to speak, two-thirds.

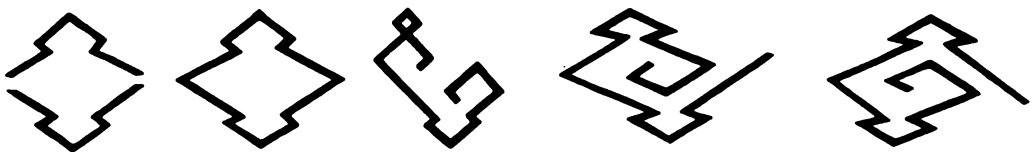


Fig. 8 a—e.

Such a combination of one up-turned and one down-turned apex is, in fact, already there, *in nuce*, in a bigger section of the Berlin Ting pattern, fig. 8c, though there it is still an open figure, not contracted and symmetricised into a closed zigzag lozenge.

If we now go back to the mirrors, we shall find all these varieties of the fundamental idea represented. In mirror E 39 we find the simple fig. 7e; in D 40 etc. the 'incomplete zigzag lozenge' (as I shall call, for brevity's sake, the figure which constitutes two-

thirds of a complete lozenge); in D 41 we find the complete zigzag lozenge as background pattern, and in D 30 we have it both as background pattern and as principal décor motif; in E 35 (fig. 8d and e, the latter an inversion of the former) we meet with a figure that is in principle identical with our fig. 8c from the Berlin Ting. As a reminiscence of its origin (the Ting figures in our fig. 8c) I shall call it «open zigzag lozenge», in spite of its being not quite symmetrical, just in order to emphasize that in principle it is closely akin to the complete zigzag lozenge (fig. 8b) of our mirror type D 30: both derive from the modified interlocked T's pattern. Their close kinship is best illustrated by a comparison of mirrors D 30 and E 33, where each mirror has four decorative figures placed in the same way, dividing the mirror into 4 sections; the figures being closed and complete zigzag lozenges in D 30 and open zigzag lozenges in E 33.

These variants of the zigzag lozenge have had a great success in Chinese ornamentation. We shall have much to do with it in the subsequent investigation. What is important here is the dating. I have already pointed out that the Berlin vessel must be pre-Han, and therefore the peculiar broken interlocked T's figure must be pre-Han. If there is any doubt of this, we may refer further to a Hu flask of the pre-Han Li-yü find, which has exactly the same pattern on its neck. Umehara, Senkoku pl. 18: 1 has a very poor reproduction of it, but I possess a good photo, in which this fact is easily observable. There is some incrustation which disturbs the picture, but I can quite well discern the pattern of our fig. 9, which is obviously the same as that on the Berlin Ting. A third example is the Ch'un-yü bell depicted in BMFEA 6, pl. 28 (also in The Chinese Exhibition, Commemorative Catalogue pl. 30); together with another element which, as we shall see presently, was pre-Han and extinct in Han time (granulation-line band), it has this very deformed interlocked T's pattern in the bottom girdle (this is not clearly visible in the reproduction, but quite distinct on the vessel itself). If the pre-Han existence of the Berlin Ting figure is thus well attested, we can, fortunately, prove that the subsequent development of it, the complete zigzag lozenge, also existed in pre-Han time. It is again the precious Shou-chou find that comes to our aid. On the Ting of Yu-wang (237—228 B. C.), which we have cited several times already, there is a figure (our fig. 4) which is nothing but our complete zigzag lozenge.¹

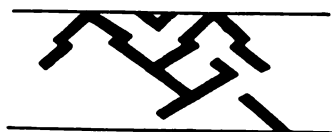


Fig. 9.

VI. Comma pattern.

By the term «comma pattern» I shall henceforth designate a pattern — or rather a strongly varying group of patterns — that has formerly been called «hooks and volutes», «feathers and furs», «silkworm pattern» etc. It is one of the standard décor elements of the Huai style, and demands some preliminary analysis.

¹ Umehara, Senkoku, pl. 125 (with rubbing); the same lozenge occurs on other vessels of the same find; see e. g. Shī er kia ki kin t'u lu 2: 11 (on a Fu).

The comma pattern has arisen in the Huai style, but it has grown out organically from other elements of an earlier origin. In t'ao-t'ie faces and dragon bodies the salient points have been emphasized by being slightly raised into a knob-like centre from which a hook or volute goes out in one direction or another, in a kind of comma-like figure; this has the effect of giving the impression of something very much alive and mobile. For an example see the t'ao-t'ie mask in our pl. 4: 1, belonging to the MFEA. Soon, however, the stylization went too far, the original face picture retreated and became more and more dissolved and effaced, and what was left was a jumble of comma figures pointing in various directions. The animal figure of the Li-yü find reproduced in our pl. 3: 1 shows this evolution in full swing. There we still observe three perfectly clear t'ao-t'ie heads, one on each shoulder and one in the middle, the latter with a dragon body of traditional shape going out to the right, with the tail raised high, cleft in a T-like shape and with the ends curled in. But already here, if one looks at the décor a little more casually, without troubling to analyse the details, one gets an impression of a jumble of comma-figures — the independent comma pattern is well on its way. Let us now regard the pattern in our pl. 4: 2, which is a «hanging blade» on the lower part of a Lei preserved in the Imperial Museum of Tokyo (Umehara, Senkoku pl. 67). It looks like a full-fledged comma pattern, a confused constellation of commas without meaning; but if we turn the figure upside down, we discern clearly the t'ao-t'ie mask, quite cognate to our pl. 4: 1 above, with its principal features emphasized by being formed into a comma shape. An exceedingly baroque and playful variation of the same theme is our pl. 4: 3 (Eumorfopoulos collection), where the t'ao-t'ie in the centre is almost entirely lost in a chaos of curling lines ending in dragon heads, the whole, so to speak, translated into a jumble of commas.

But, as already stated, the t'ao-t'ie was only one of the points of departure for the finally independent comma pattern. Another was the dragon, or rather dragons, which had different shapes and attitudes and which therefore gave rise to different kinds of comma constellations. In pl. 5 I have placed side by side two bells, both with pre-Han and (according to the script type) fairly early inscriptions. The one to the right (Cheng sung t'ang ki kin t'u, shang 2, Ch'u wang Kün Chung) has two clear and unadulterated dragons placed antithetically. The one to the left (Tsun ku chai so kien ki kin t'u 1: 4, Wang sun K'ien chê Chung) has nothing but a mass of irregularly combined commas, but the very placing of the latter clearly shows that at the bottom of the picture, though now entirely lost through a violent stylization, lies an antithetical pair of dragons of much the same kind as in the preceding bell. Here the comma pattern is already achieved, but its origin is still discernible, though only thanks to the telling parallel.

Again, our pl. 4: 6 shows the upper surface of the big Chung bell in the MFEA, which has often been depicted (BMFEA 6, pl. 27, Kümmel, Kunst pl. 25, Umehara, Seikwa pl. 199, Umehara, Senkoku pl. 101). The left part of our illustration is a photograph of one half of the surface, the right part is a rubbing of the same. At a cursory glance we get an impression of a jumble of comma figures. But if we examine the rubbing more

closely, we find that it is a very systematic and consistent combination of dragons, a detail of which we give here in an enlarged drawing (fig. 10). Further, in pl. 6: 1 we give a section of the décor on a Hu flask in the collection of Dr. Becker, Köln. This is almost entirely a mere comma pattern, but there are still visible some traces of a dragon figure, though much corrupted and dissolved. Sometimes, as in pl. 6: 2 (a detail from a P'an, Umehara, Seikwa pl. 173) it is impossible to decide whether the original animal picture has been a t'ao-t'ie or a dragon: we only discern a big eye and a few comma shapes as rudiments of the rest of the drawing. Cf. also BMFEA 6, pl. 35: 1, where right in the middle of a comma constellation there is a realistically depicted claw.



Fig. 10.

Indeed, the evolution very early led up to the independent comma patterns, quite detached from the t'ao-t'ie or dragon shapes that underlie them from the beginning. Just because of the strongly varying original *substrata* these patterns vary indefinitely: sometimes the commas are placed at all kinds of angles in relation to each other, sometimes they are ranged in straight rows, horizontal or vertical. In our mirror class C below we shall find a great many different examples of this. Here we give only a few examples selected from ritual vessels. Pl. 6: 3 is from a flat Hu in the Imperial Household Museum of Tokyo (Umehara, Senkoku pl. 70). Pl. 6: 4 is from a similar flat Hu in Verburgt collection, the Hague (Umehara, Seikwa pl. 187). Pl. 6: 5 is from a Hu in the Tsun ku chai collection, Peking (Shī er kia ki kin t'u lu 10: 14). Pl. 6: 6 is from the interesting bowl in the Kin-ts'un find, studied in particular by Andersson (White, Tombs pl. 113). Pl. 6: 7 is from another bronze of the same Kin-ts'un find (White, Tombs pl. 106). Pl. 4: 5 is the top surface of one of the bells in the Piao set, 550 B. C. (Umehara, Rakuyō, suppl. pl. 3). Pl. 6: 8 is from a Hu in the Chinese Government collection (Wu ying tien yi k'i t'u lu pl. 119). Pl. 6: 10 is a rubbing from the Ch'ou er Chung bell datable circa 535 B. C., cf. Karlgren BMFEA 8, p. 67 (K'i ku shī ki kin wen shu 9: 14). Pl. 2: 2 is the famous big basin of king Fu-ch'ai of Wu, who reigned 495—473 B. C., in the Oeder collection. And finally pl. 6: 9 is a rubbing, unfortunately very poor but important because of its date and hence reproduced here, of one of the accessory vessels in the set of king Yu-wang of Ch'u (237—228 B. C.) in the Pao Ch'u chai collection (Shī er kia 2: 8, also in small scale in Umehara, Senkoku pl. 125).

I have discussed this comma pattern at length as it is one of the most important Huai style décor elements, and particularly interesting for the two reasons fully developed here. On the one hand, its derivation from animal representations is indubitable, on the other hand we know it, in highly varying versions, from datable specimens of many centuries, from 550 B. C. (the Piao bells)¹ down to Yu-wang's bronzes (237—228 B. C.). And it should be observed that already as early as the Ch'ou er Chung bell (pl. 6: 10, ca. 535 B. C.) and the Fu-ch'ai basin (pl. 2: 2, between 495—473 B. C.) it is of a

¹ The Si tsī Hu of the Kin-ts'un find (White, Tombs pl. 114, Umehara, Rakuyō pl. 4), which to judge from the ductus of the script of its inscription is even somewhat older than the Piao bells, also has a version of the comma pattern; the photos are too poor to allow of a renewed reproduction here.

very advanced and mechanized type, quite similar to that on the mirrors of our cat. C below.

We have now enumerated 6 décor elements (I—VI) of the Huai style which are well attested either through specimens belonging to pre-Han finds or by objects with pre-Han inscriptions, as having existed already in pre-Han time. If we now turn to our rich categories of mirrors already determined as datable in early Han time, in the 2nd c. B. C., as well as to other kinds of objects known to be of Han time, and try to ascertain from them whether these 6 Huai style elements live on, across the political frontier formed by the accession of the Han in 206 (202) B. C., and continued to flourish in early Han time, we shall find the following.

I. *Volute-and-triangle*. This element by no means died out with the end of the pre-Han era. It lived on quite vigorously in Han time, as testified to by our mirror categories F and H, where we find it as a frequently occurring background pattern. And indeed, it survived for centuries, for we find it, still greatly beloved by the Chinese artist, as a border pattern e. g. in the Korean Lo-lang finds of Eastern Han time (Harada, *Lo-lang*, pls. 76, 85, *lacker bowls*, Sekino, *Arch. Researches*, Plates part II, fig. 1255, mirror, etc.) as well as on the famous inlaid bowl studied in detail by Rostovtzeff, which cannot be earlier than Middle Han time.¹

II. *Granulation filling*. This element also survived the political landslide. We shall meet with a variety of it in our mirror cat. F; and even in late Eastern Han time it still had an important function as décor of fields that needed to be filled in; as an example, see the mirror category illustrated in Senoku seishō (*Sumitomo cat.*), mirror volume, pl. 20.

V. *Zigzag lozenge*. This element we still find in full bloom in Han time. The cat. F has it (in the open variety) quite often, worked into the picture of the dragons.

¹ M. Rostovtzeff, *Inlaid Bronzes of the Han dynasty*, 1927, pl. V. Rostovtzeff says p. 45: «All the dated objects of the art of the Han period belong to a comparatively late time. None is earlier than the 1st c. B. C., many are much later. None of these things show the main aspects of the art of the Han period in their finest development and in their original forms. We feel that the motives are already standardized and schematized. In none of these objects do we find such a beautiful cloud-scroll, in none such wonderful animals so true to nature and so full of life, as on our inlaid bronzes. And yet both the scroll and the animals appear in the same forms, in the same postures, in the same groups in other things of the Han period. The difference consists in that on our bronzes they are not yet schematized and standardized, not yet debased. And this shows that we must ascribe our bronzes not to a later period, not to the post-Han art but to the earlier part of the Han period, the second century B. C.» The testimony, however, of the animal figures of the bowl goes against this. There is a wonderful pair: a tiger and a lion. Of the latter Rostovtzeff says (p. 16): «The other is undoubtedly a lion represented in all its beauty with its typical beard and a splendid mane . . . There is no doubt, the artist who made the two beasts had seen and observed them. A mere copy of a foreign original cannot produce such striking figures, full of life and movement, with a wonderful observation of the psychology of both the tiger and the lion». This analysis is quite justified, the artist must have seen the lion. But the lion remained unknown in China in early Han time. It was only through the contact with the Western world from Wu-ti's time onwards that it became known at all, and the first living lions came to China as remarkable presents to the Emperor in 87, 89, 102 and 133 A. D. The bowl in question cannot be earlier but very well later than Middle Han time.

And we can testify to its existence much later: among the Noin Ula finds (dated by an inscribed bowl of 2 B. C.) we come across several textiles which have the closed zigzag lozenge and halves of it, see our pl. 6: 11.

III, IV, VI. The elements III, granulation-lined band, IV, interlocked T's, and VI, comma pattern, on the contrary, have not at all survived into Han time. And this is extremely important, since these elements belong to the most essential and characteristic features of the Huai style.

If we are able to state that the granulation-lined band, the interlocked T's and the comma pattern never occur on objects datable in Han time by inscriptions or by find circumstances, we refer to various kinds of objects.

We observe it most clearly in that class of bronzes which we have made the basis of our investigation: the mirrors, because here a rich inscriptional material comes to our aid. As has been proved in detail above, there is a series of mirror categories which can with a high degree of certainty be dated in early Han time, 2nd c. B. C., our categories F, H, J, K below. This, as the reader will find, is a rich and highly varied assortment of mirror types, some of these types are represented by a great number of specimens. In these categories the custom of filling the background with geometrical patterns is still vigorously alive; the mode of leaving the bottom empty is barely beginning to crop up in a very few instances, and becomes common and popular only in middle and later Han time. But, in spite of the fact that as a rule we always have a patterned background filling in these rich mirror categories, we never find any of the said three elements, either figures bordered by granulation-lined bands, or interlocked T's or comma pattern. And this is all the more striking since we possess, on the other hand, some large and comprehensive classes of mirrors (categories C and D) on which figures (mostly zigzag lozenges) bordered by granulation-lined bands, as well as interlocked T's and the comma pattern are extremely common as background filling. The conclusion cannot be but one: these categories (C and D) that have granulation-lined bands, interlocked T's and comma pattern as background filling are of pre-Han date.

We may turn the same matter round in another way and express the same conclusion in another fashion. The categories that have granulation-lined bands, interlocked T's and comma pattern are quite extensive, represented by a large number of mirrors, and a great variety of types. These are category C and the major part of category D below. On the other hand, the inscribed early Han mirrors are also very numerous and of quite a number of different types; these are our categories F, H, J and K below. The custom of inscribing mirrors arose in early Han time, in the 2nd c. B. C., and mirrors with inscriptions in pre-Han script are entirely unknown. Now, suppose that the large categories C and D existed in early Han time just as well as and parallel with the inscribed F, H, J and K classes, how is it that the former never have an inscription? Is it likely that the great number of C and D mirrors would never have been allowed to carry an inscription if they were contemporaneous with the great number of the F, H, J and K classes, which frequently

carry inscriptions? Of course not; the explanation of the lack of inscriptions in the C and D categories (characterized by comma pattern, interlocked T's and granulation-lined bands, as against the absence of these elements in categories F, H, J, K) is, that they were not, like F, H, J and K, of early Han time but of pre-Han date.

It should be added that it is not a different general disposition of the mirrors that makes categories C and D unsuitable for an inscription, whereas cat. F, for instance, is well adapted for the insertion of such a text. On the contrary, in this respect both the C—D mirrors and the F mirrors are quite similar: in both classes there is an inner circular or square band that is eminently suitable for an inscription. In mirrors like C 35, 45, 47, 68, 69, 75 etc. the inner band invites an inscription just as much as in F 1, 3, 19, 21 etc. And yet the C and D classes never have that tempting band filled, the F class very often. The conclusion drawn just now is obvious: if in categories C and D the inner circular or square band, in spite of its tempting character, has never been filled with an inscription, it is because these mirrors were cast at a time when the custom of inscribing this inner band had not yet arisen.¹

Besides the richest material, the mirrors, there are various other groups of materials that strongly corroborate this conclusion. We have the finds at Noin Ula, where the textiles show a great many geometrical patterns (see e. g. Kümmel, *Kunst* pls. 47—59, Trever pls. 3-21); we have the Korean finds of Eastern Han time excavated by the Japanese, which offer a great variety of objects, bronzes, lacquer bowls, tiles etc. which have many kinds of geometrical décor patterns²; and we have a great number of tomb tiles which by means of inscriptions or find circumstances can be dated in Han time, and which likewise have border bands with geometrical patterns (see e. g. Han tai k'uang chuan tsi lu, and Chavannes, *Mission archéologique dans la Chine septentrionale*). And nowhere in this very comprehensive material do we find these three standard Huai style patterns: figures with granulation-lined border bands, interlocked T's, comma pattern, which we concluded — by aid of the mirrors — to be of pre-Han date³.

We have now arrived at a very important primary result, to serve as our new point of departure: that three fundamental décor elements, not only on mirrors but also on

¹ In Middle Han time, 1st c. B. C., there is a small category of mirrors (Umehara, *Seikwa* 4, pls. 49—52 etc.) which is never inscribed, in spite of its being of Han date; but this is just because the general arrangement of these mirrors does not at all lend itself to the placing of an inscription: there is indeed no obvious space for a text.

² Harada, *Lo-lang*, pls. 48—52, 61—68, 73, 76—78, 85, 89—94, 97, 98, 105. Sekino, *Archaeological Researches*, Plates part 1, figs. 420—23, 435—37, 517, 520—42, 595—600, 603—08, 641—47, 653—54, 663—69, 674, Plates part 2, figs. 950—1081, 1113—1210. Oba, *Tomb of Wang Kuang*, pls. 47—49, 62, 67, 69—72, 74—76. Hamada, *Tomb of Painted Basket*, pls. 41—55, 58, 59, 68, 105, 106, 108—111, 113—117.

³ White, *Tomb tile pictures in ancient China*, has published a series of tiles which he considers to be of the 3rd c. B. C.; here, right enough, we find border bands filled with interlocked T's, which strongly confirms White's conclusion as to their date.

Huai style objects generally: comma pattern, interlocked T's and granulation-lined bands, constitute criteria which date the objects — mirrors or other things — as anterior to ca. 200 B. C. We shall now test this result in a more detailed analysis of the various mirror categories, and we shall find it amply corroborated by the fact that it works very well as a key to the mirror chronology.

Before we do so, however, it may be worth while to apply the primary results of our investigation to various kinds of ritual bronze vessels and draw up a list of specimens in recognized good Huai style which, by these criteria, may be stated to have been manufactured not in early Han time but in the pre-Han era. We shall then, of course, skip such specimens as are known for other reasons to be pre-Han (objects of the Sin-cheng, the Kin-ts'un, the Li-yü and the Shou-chou finds, objects with pre-Han inscriptions). And for brevity's sake we shall mark the specimens in our list with the following *signa* indicating the criteria: α = Ting with decorated body surface; β = specimens decorated with comma pattern; γ = specimens decorated with interlocked T's (regular or modified, as in the case of the Berlin Ting); δ = specimens decorated with granulation-lined bands. We shall limit this list to a few well-known albums (stray objects in small articles in periodicals not being included), and no albums with only drawn pictures are included, only those containing photographs.

Senoku (Sumitomo collection) pl. 44, Hu (β).

Ibid. pl. 46, Hu (γ).

Ibid. pl. 124, Bell (δ).

Umehara, Seikwa pl. 173, P'an, Burchard, Berlin (β).

Ibid. pl. 174 Basin, Musée Cernuschi, Paris (β).

Ibid. pl. 176, Basin, Vignier collection, Paris (γ).

Ibid. pl. 179, Ting, Yamanaka, New York (α).

Ibid. pl. 180, Ting, Royal Ontario Museum, Toronto (α).

Ibid. pl. 181, Ting, Owen Robert collection, New York (α).

Ibid. pl. 182, Ting, Buckingham collection, Art. Inst. Chicago (α).

Ibid. pl. 183, Ting, Metropolitan Museum of Art, New York (α , γ).

Ibid. pl. 187, Hu, Verburt collection, the Hague (β).

Umehara, Senkoku pl. 29, Ting, the Röhss Museum, Göteborg (α).

Ibid. pl. 30, Ting, Mrs. Holmes collection, New York (α).

Ibid. pl. 35, Ting, Staatl. Mus. Berlin (α , γ).

Ibid. pl. 38, Ting, Ota collection, Kyoto (α).

Ibid. pl. 39, Ting, Imperial Household Museum, Tokyo (α).

Ibid. pl. 40, Ting, Fujii collection, Kyoto (α).

Ibid. pl. 41, Ting, Yamanaka, Osaka (α).

Ibid. pl. 66, Lei, Imperial Household Museum, Tokyo (β).

Ibid. pl. 69, Hu, Imperial Household Museum, Tokyo (β).

Ibid. pl. 71: 1, Hu, Mus. Aziat. Kunst, Amsterdam (β).

Ibid. pl. 71: 2, Hu, Yamamoto collection, Tokyo (β).

Tch'ou Tö-yi, Bronzes antiques de la Chine pl. 31, Ting (α).

- Yetts, Eumorfopoulos coll. I, pl. 3, Ting (α).
 Ibid. pl. 4, Ting (α).
 Koop, Early Chinese Bronzes, pl. 30, Ting, Curtis collection (α).
 Ibid. pl. 31, Ting, Murray collection (α).
 Ibid. pl. 32, Ting, Murray collection (α).
 BMFEA 6, pl. 28, Ch'un-yü bell, MFEA (γ , δ).
 Ibid. pl. 31: 2 Ting, Axel Jonsson collection, Göteborg (α).
 The Chinese Exhibition, Comm. Cat. pl. 29: 105, Ting, Chinese Government (α).
 Ibid. pl. 31: 142, Hu, Pilster collection (β).
 Hakkaku kikkin shū pl. 24, Ting (α).
 Shūkan ihō, pl. 8, Ting, Imperial Household Museum, Tokyo (α).
 Wu ying tien yi k'i t'u lu, pl. 28, Ting (α).
 Ibid. pl. 30, Ting (α).
 Ibid. pl. 113, Hu (δ).
 Ibid. pl. 117, Hu (β).
 Ibid. pl. 119, Hu (β).
 Ibid. pl. 122, Hu (β).
 Hai wai ki kin t'u lu, pl. 6, Ting (α).
 Shī er kia ki kin t'u lu 10: 14, Hu, Tsun ku chai (β).
 Sung chai ki kin sü lu pl. 16, Ting (α).
 Ibid. pl. 17, Ting (α).

This list only gives some examples of specimens that have long been recognized as belonging to the Huai style and which can now be determined as having been cast in pre-Han time. A great many more may easily be found in various public and private collections. The MFEA, for instance, possesses three more (unpublished) Ting tripods in good Huai style, the decorated surfaces and other details of which now place them in pre-Han time. There is thus a very comprehensive material for the study of pre-Han vessel shapes and ornamentation.

In the following description of the categories of early Chinese mirrors I have not tried to make a complete record of all known mirrors in Western collections. Besides mirrors in Swedish collections I have only adduced such mirrors as: 1. are of a type not represented in the latter; 2. are of a known provenience; 3. are reproduced in large-size and clear photographs, suitable for a detailed study, in well-known albums or periodicals.

Before entering upon a detailed description of the various categories, we should make a few general remarks on the knobs and the rims. All the categories that are treated in the present article, except the last (cat. L), i. e. early mirrors down to 100 B. C. (categories A—K), are thin mirrors and have as a common feature comparatively very small knobs, little more than a mere loop for passing a silk string through, and the knobs are often fluted. Since the knob does not constitute a feature that serves to

distinguish our categories A—K here, I shall not reiterate this description, but consider it to have been stated here — as a characteristic feature of all early Chinese mirrors — once and for all.

The rim is a far more complicated matter. In certain cases, as in many instances of cat. D (e. g. D 2, 6), we find that the disc goes out to the periphery without any special

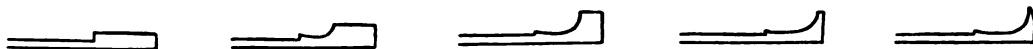


Fig. 11 a—e.

rim. But where — as is mostly the case — there is a distinct rim, this may be fashioned in several highly important types. First, there is the flat rim (fig. 11 a). In contrast to this there is the concave rim; but the latter is in many varied forms. It may be that the inner half of the rim is concave, and the outer half is comparatively low and flat, fig. 11 b; this is particularly characteristic of our cat. D. Or it may be that the inner half has the same concave bend but the outer half runs up to an appreciable height, forming a ridge which, again, may be more or less flat or sharp on the top, figs. 11 c—e. There are, in fact, any number of intermediate stages in this respect, and it would be futile to make any historical deductions from the finer nuances. But the general principles are, on the contrary, of considerable importance, for we shall find that the highest and most sharp-edged varieties are always to be found in our categories C, E, F, H, J, practically never in cat. D. We cannot, therefore, afford to pass over this matter of the rim in silence, but shall have to pay attention to it in every category described below.

CATEGORY A.

In this category, which is inserted only as a preliminary, are placed a few mirrors which give an impression of being very early, without allowing of any very great precision in dating, since the material is too limited.

A 1. Pl. 7. Central circular field flat and bare; flat rim; in the *décor* zone, on a background of clumsily drawn *leiwen*, four animals in high relief with bodies covered by granulation; diam. 8 cm. Collection of Dr. Axel Lagrelus, Stockholm (henceforth called: Lagrelus collection).

A 2. Pl. 7. Small central field, round which a band with a flower of 6 petals; then a band filled with running spirals; then a broader zone filled with interlaced dragons placed alternately with the head inwards and the head outwards. The lower jaw of one dragon continues into the body of the next (fig. 12). The salient points of the bodies are emphasized by being slightly raised in comma-shaped volutes; outside



Fig. 12.

this zone there is a flat rim, and in it a depression in which is inserted a band of cowries; diam. 8 cm. Lagrelius collection.

A 3. Pl. 7. Immediately round the knob there is a snake-like dragon; then a zone filled with four animals (tigers?) in high relief; dragon and animals covered with granulation; in a depression in the rim is inserted a rope pattern; diam. 6.1 cm. Collection of H. R. H. the Crown Prince of Sweden (henceforth called: Crown Prince collection).

✓ A 4. Pl. 7. A very small central circular bare field; then a broad zone with a granulation background and three dragons in flat relief; then a narrow bare band, then a band with loosely twisted double-strings, then another narrow bare band, followed by a narrow band of cowries, and finally a flat rim. *Lo-yang region*. Diam. 9 cm. Hallwyl collection. Hallwylska Samlingen pl. I: E 1.

It is certain that these four mirrors represent a very early stage in the history of the Chinese mirror. We know from texts¹ that mirrors worn in the girdle were already in use in the 7th c. B. C., and there is therefore no reason whatever why we should hesitate to place some of our typologically earliest groups as early as the 7th—6th centuries. Now, these four mirrors have features such as never recur in the categories which, as we shall see, must have filled the centuries (5th—3rd c.) immediately before the Han era. As such features we may record the following: the coarse *leiwen* of A 1; the high relief in A 1 and A 3; the dragon shapes in A 2; the cowrie band in A 2 and A 4; the primitive granulation-filled background in A 4. The loosely twisted double-strings (like-wise a well-known Huai-style feature) in A 4. The fact that none of these features recur in our categories B—D below justifies our dating these A mirrors early, e. g. in the 6th c. B. C. or possibly even earlier. But, as already stated, these figures are very uncertain because the number of specimens is too limited; without whole series no binding conclusion can be drawn.

CATEGORY B.

B 1. Pl. 8. Small knob with no central field; two t'ao-t'ie figures opposite each other and turned outwards, with comma-shaped emphasized points, claws realistically depicted; on the two sides other claws are visible, suggesting two more t'ao-t'ie outside the range of the décor field; flat rim. *Lo-yang region*. diam. 12 cm. Lagrelius collection.

A mirror of the same kind, Kümmel, Gedächtnis pl. 36 a (also Umehara, Seikwa 4: 3 a). *Lo-yang region*. Staatl. Mus. Berlin.

A mirror of the same kind, Umehara, Rakuyō pl. 42. *Lo-yang region* (Kin-ts'un find). Toronto Museum.

¹ B. Karlgren, BMFEA 6, p. 13.

Mirrors of the same kind, Umehara, Seikwa 4: 3b and Kanizen 4: 4, Bidwell collection; and Umehara Kanizen 4: 3, David-Weill collection.

B 2. Pl. 8. Small bare central field, then a bare circular band; for the rest, very similar to the preceding. Becker & Newmann, Köln.

A mirror of the same kind, Swallow, pl. 2. Diam. »3 inches». *Lo-yang region*. Swallow collection.

A mirror of the same kind, Umehara, Kanizen 4: 1. Moriya collection.

B 3. Pl. 8. Square mirror; no central field; in the décor zone the same scheme as in B 1 above: two t'ao t'ie masks, in the same style and execution, with the same comma-details and the same realistic claws; at the two sides, likewise, claws suggesting two more t'ao-t'ie outside the zone and therefore invisible; flat rim. *Lo-yang region*. Size 13.5×13.5 cm. MFEA (K. 11 276: 120).

✓ **B 4. Pl. 8.** Very small central field and circular bare band; the décor (not very clearly visible in the photographs) is described by White thus: »At the top just inside the rim was a solitary t'ao-t'ie face; just below this and on each side were two dragons facing towards the t'ao-t'ie. In apposition to these on the lower halves of the mirror were two phoenixes, with beaks wide open shewing strong pointed teeth». *Lo-yang region* (Kin-ts'un find). Royal Ontario Museum. White, Tombs, pl. 52, Umehara, Rakuyō pl. 42: 2.

B 5. Pl. 8. Very small central field and bare band; décor zone divided into four sections by diametrical double-bands, with side-volutes, and with volutes in the angles; in these sections, close to the border, four animals (dragons?) with granulated bodies; flat rim. Moriya collection. Umehara, Kanizen pl. 3: 2.

This category, in which all but the last specimen have t'ao-t'ie décor, is difficult to determine chronologically. There is no reason to doubt that two of the class come from the Kin-ts'un tombs, since this is corroborated by the *Lo-yang* provenience of several other examples. Moreover, the Kin-ts'un bell Umehara, Rakuyō pl. 3 (Imperial Household Museum) has a décor quite similar to that of B 4. But this fact, of course, gives no other dating than that it confirms their pre-Han age. The long row of Kin-ts'un tombs cover a period approximately ca. 450—ca. 230 B. C., and, besides, there is nothing to show that they may not contain objects manufactured long before the tomb era. All these mirrors, however, have the broad, flat rim which we observed already in the patently very early category A. Moreover, their t'ao-t'ie heads testify to an early date. The t'ao-t'ie is one of the Yin and Yin-Chou décor elements that became obsolete in the centuries of the Middle Chou style, but were revived in the Huai-style, though in a modified form. Now, the t'ao-t'ie of our mirrors here are of a quite primary type within the Huai style, compared with the elegant but often highly schematized t'ao-t'ie faces that occur especially on the handles of a great many Huai style vessels. A probable date is therefore 6th—5th c. B. C. Here, again, the group is too limited, and has too few variations to allow of a typological evolutionary series which could furnish really conclusive evidence.

CATEGORY C.

In this category I have brought together a great number of mirrors of highly varying types and therefore certainly covering a long period of time. They all have this in common that as a background décor they have the comma pattern, or patterns closely akin to it. In this category there is nearly always a bare central field, generally quite small. The decorative bands and the rim are often set off by a narrow ledge or by a raised line (thread). These features, once mentioned, will not be reiterated in the descriptions below. In regard to the rim, there are a few cases of flat rim, which, as we shall find, are historically important, and this will therefore be pointed out in each case. But for the rest there is always a concave rim, and in the majority of cases it curves up to a more or less high ridge, often even a sharp edge (type of fig. 11 c—e above). This having been once stated, it will not be repeated in the individual mirror descriptions.

C 1. Pl. 9. Round central band; décor zone filled with comma figures; flat rim. The comma figures are impressed by die in squares, which are thus repeated, and inside such a square the configuration is very complicated, probably a reminiscence of the animal shape from which the pattern has been derived by a violent stylization. Stoclet collection. Umehara, Kanizen pl. 3: 1, and Seikwa 4: pl. 4.

C 2. Pl. 9. Round central band; décor zone filled with striped comma pattern, with granulation in the interstices. MFEA (K. 11 057: 39).¹

A mirror (fragmentary) of the same kind MFEA (K. 11 003: 11). Another of the same kind; diam. 6.5 cm. Lagrelus collection. Another of the same kind, Bidwell collection, Umehara, Seikwa 4: pl. 13 a (the same mirror in Kanizen pl. 1: 4, there stated to be in the David-Weill coll.).

C 3. A mirror of very similar type, the commas slightly differently placed. *Shou-chou region*. Yamanaka, Osaka. Umehara, Kanizen pl. 2: 2.

C 4. Pl. 9. Square central band; décor zone filled with striped comma pattern; flat rim. *Lo-yang region*. Diam. 8.4 cm. MFEA (K. 11 276: 110).

C 5. Square central band, décor zone with comma pattern quite like the preceding; double ledges inside the concave rim. David-Weill collection. Umehara, Seikwa 4, pl. 5 b, and Kanizen pl. 1: 5.

C 6. Pl. 9. Round double central band, décor zone with striped comma pattern; flat rim. *Shou-chou region*. Staatl. Mus. Berlin.

C 7. Pl. 9. Round central band; décor zone with comma pattern; flat rim; the commas, placed at different angles to each other, in part combine to form heart-shaped figures;

¹ For a few mirrors in the MFEA coll. I can give no diameter figures. The mirrors had to be packed and sent away on account of war risk, before I had an opportunity of making a final check on the dimensions. This lack of data is of no great importance to our investigations in the present paper, all the more so as I have constantly to work with mirrors in foreign collections which have been published without dimensional figures.

they are broad and large, and filled with volutes and volutes-and-triangles; granulation filling in the interstices; diam. 8.8 cm. Crown Prince collection.

- C 8. *Pl. 10.* Round central band; décor zone with broad commas, filled with stripes, ground striped; diam. 8.7 cm. Collection of the late Sir Anders Hellström, Mölndal (henceforth called: Hellström collection).

- C 9. Square central band; décor zone with broad commas, filled with stripes, ground striped, like the preceding. Moriya collection, Kyoto. Umehara, Kanizen pl. 2: 1.

A mirror of the same kind. *Lo-yang region*. Yenku fig. 3.

- C 10. *Pl. 10.* No central field and no central band — very unusual in this category; décor zone with broad commas, filled with stripes, striped ground; flat rim. Hellström collection.

- C 11. *Pl. 10.* Round central band; décor zone with broad and bare commas, placed similar to those of C 7 above; flat rim. Lagrelus collection.

A mirror of the same kind, Moriya collection. Umehara, Kanizen pl. 2: 3.

- C 12. *Pl. 10.* Round central band; décor zone with comma pattern; flat rim; the broad commas have raised borders and are sometimes slightly striped, ground here and there slightly striped. *Shou-chou region* (Ku-shi-hien). Diam. 8.4 cm. Hallwyl collection.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 1.

A mirror of nearly the same kind (central band lacking ledge). *Shou-chou region*. Yenku fig. 2.

- C 13. *Pl. 10.* Central field filled with a somewhat flower-like figure — very unusual in this category — in comma-technique; square central band; décor zone with comma pattern like the preceding. *Lo-yang region* (Kin-ts'un find). »Diam. 3.6 inch.« White pl. 49, Umehara, Rakuyō pl. 43: 1.

- C 14. *Pl. 10.* Round central band; décor zone with comma pattern of a very stiff and schematic type. David-Weill collection. Umehara, Kanizen pl. 1: 3.

A mirror of the same kind. *Huei-hien*, *Honan*. Swallow pl. 4.

- C 15. *Pl. 11.* Square central band; décor zone with a pattern cognate to the comma pattern, but derived from interlaced dragons, as seen from a comparison with some of the Sin-cheng vessels (cf. for instance Sin cheng yi k'i, pl. 28). *Lo-yang region*. Diam. 9 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. Moriya collection. Umehara, Kanizen pl. 2: 5.

- ✓ C 16. *Pl. 11.* Only a narrow ledge round the central field; from this a quatrefoil; décor zone with striped comma pattern, interstices filled with granulation; *Shou-chou region*. Diam. 9.2 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region*. Diam. 10 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region*. British Museum.

A mirror of the same kind. Cull collection. Diam. 8.6 cm. Yettis, *The Cull Chinese Bronzes*, pl. 23.

A very similar mirror, Hermitage collection. Umehara, Seikwa 4, pl. 14 a.

C 17. Pl. 11. Same characteristics as the preceding, only the quatrefoil petals have a border with slanting strokes, and the décor zone is wider. *Shou-chou region*. Diam. 11 cm. Hellström collection.

A mirror of the same kind (fragmentary). *Shou-chou region*. Diam. 11.1 cm. MFEA (K. 10 599: 531), Umehara, Kanizen pl. 1: 6.

A mirror of the same kind; diam. 11 cm. Crown Prince collection.

C 18. Pl. 11. Square central band, petals of a quatrefoil from the sides of this square; décor zone with broad and striped commas, very stiff and schematic. Moriya collection, Umehara, Kanizen pl. 2: 4.

C 19. Pl. 11. Square central band, outside this four big petals extending throughout the entire décor zone with comma pattern; the petals adorned with curved lines and slanting strokes; double ropes inside the rim. *Shou-chou region*. Diam. 9 cm. Lagrelius collection.

A similar mirror, but without the ropes. *Shou-chou region*. Staatl. Mus. Berlin.

C 20. Pl. 11. General character like the preceding, but the décor zone broader, the petals only reaching half-way through it. Oeder collection.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 9.

C 21. Pl. 12. Square central band, from the sides of which the four petals of a quatrefoil; décor zone filled with plait-pattern. I have inserted this mirror here, where it does not really belong, not having the comma-pattern filling, because of the similarity in general character to the preceding mirrors. *Shou-chou region*. Diam. 7.5 cm. Lagrelius collection.

C 22. Pl. 12. Round central band, big quatrefoil, the petals nearly reaching through the comma- and granulation-filled décor zone; the centre of the petals is cognate to that of C 19 and C 20, but an outer border is filled with granulation, and the petals are more of a heart-shape. Said to have come from Shensi. MFEA (K. 11 033: 20).

C 23. Pl. 12. Round central band with slanting lines; the quatrefoil petals are moved out on a short «stalks»; petals heart-shaped, and adorned again with a trifoil; zone filled with commas on a granulated ground; diam. 11.2 cm. *Shou-chou region*. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 11.

C 24. Pl. 12. Central field simply bordered by a raised line; quatrefoil petals, on short «stalks», have a shape recalling a Mongol cap with ear-flaps. *Shou-chou region*. Malmö Museum.

A mirror of the same kind. *Shou-chou region*. Diam. 11.2 cm. Hellström collection.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 10.

C 25. Pl. 12. Round, narrow central band with four incisions; quatrefoil petals on short «stalks» with slanting strokes and having a border with slanting strokes, like C 17 above; décor zone with comma pattern on a granulated ground; diam. 10.6 cm. Hellström collection.

A similar mirror, though with smaller décor zone, Swallow pl. 24.

- C 26. *Pl. 12.* Quatrefoil directly on to the central field; from the point of the petals, long »stalks» ending in a new set of four petals; décor zone with comma pattern in unusually strongly demarcated squares with striped ground. *Shou-chou region*. Hellström collection.
- C 27. *Pl. 13.* Square central field with a ledge, from the sides of which a quatrefoil, with slanting-stroked borders; from the points of the petals, as in the preceding, long »stalks» with slanting strokes, ending in four new petals; zone filled with striped comma pattern on a granulated ground. *Shou-chou region*. Diam. 11 cm. Hellström collection.
- C 28. *Pl. 13.* Square central band, from the corners of which a quatrefoil bordered with slanting strokes and prolonged with »stalks» and new petals, as in the preceding; but on the points of these outer petals are added some »flail»-like figures, bent to the right; in addition to all this, there is inserted in the middle of the zone a square in rope pattern (with slanting-strokes), from the corners of which four more petals with stroke-adorned borders; comma pattern and granulation as in the preceding. *Shou-chou region*. Diam. 13.2 cm. Lagrelus collection.
- C 29. *Pl. 13.* Square central band, with quatrefoil petals at the corners; from the rim, pointing towards the sides of the central band, four »stalks» with petals; comma pattern on a granulated ground. Jung Keng, *Ku king ying* 1935, pl. 12.
- C 30. *Pl. 13.* Small central field with ledge, forming the centre of a quatrefoil; décor zone with comma pattern on a granulated ground, divided into four panels through zigzag lines in rope pattern; in each of those panels the central figure (round field with ledge and quatrefoil) is repeated; and finally, from the rim, there are in four places a petal, suggesting another set of four quatrefoils, only partially visible. *Shou-chou region*. Diam. 12 cm. Lagrelus collection.
- C 31. *Pl. 14.* Square central band, inside which in the central field is a quatrefoil; in the décor zone four quatrefoils, and from the rim four inward-pointing petals, as in the preceding. Yamanaka, Osaka. Umehara, Kanizen pl. 12: 1.
- C 32. *Pl. 14.* Round central band; in décor zone broad commas with raised outlines, on a lined ground; over this, with the stems towards the rim, three large slanting T's; the latter are executed, in this as in all the following mirrors, as broad, slightly concave bands. *Shou-chou region*. Diam. 10.8 cm. Lagrelus collection.
- C 33. *Pl. 14.* Square central band; décor zone with striped commas on a granulated ground, four big slanting T's, the top lines of which are parallel to those of the central square. Ivan Traugott collection.
- C 34. *Pl. 14.* Square central band; décor zone with commas and granulation, and four slanting T's with the top strokes facing the corners of the central band. *Shou-chou region*. Diam. 12.5 cm. Lagrelus collection.
- C 35. *Pl. 14.* Square central band, décor zone with commas and granulation, as the

preceding, four slanting T's with the top lines at a sharp angle against the sides of the central square. *Shou-chou region*. Diam. 9.5 cm. Lagrelius collection.

- C 36. Pl. 14. Round central band; décor zone with commas and granulation; five slanting T's connected by ledges so as to form a star; outer part of rim broad. *Lo-yang region*. Yen'ü fig. 24.

A similar mirror, but with no granulation and no connecting ledges, outer part of rim less broad. Yamanaka, Osaka. Umehara, Kanizen pl. 9: 4.

- C 37. Pl. 15. Round central band; décor zone with some curious hook-like figures, not really comma pattern but akin to it, on a ground of granulation and volutes-and-triangles, six slanting T's connected by their ledges in an irregular system, so as to form an asymmetrical star. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind, Winthrop collection. Umehara, Seikwa 4: pl. 15 a, and Kanizen pl. 10: 4.

- C 38. Pl. 15. Round central band; décor zone filled with the same pattern, akin to the comma pattern but derived from interlaced dragons, which we studied in C 15 above; six slanting T's placed as in the preceding mirror, but with the ledges connected more regularly, so as to make the star more symmetrical. Hellström collection.

- C 39. Pl. 15. No central band, quatrefoil emanating direct from the central field; décor zone with striped commas on a striped ground; four slanting T's. *Shou-chou region*. Diam. 8.5 cm. Lagrelius collection.

- C 40. Pl. 15. Round central band, from which project five petals; striped commas on a granulated ground, five slanting T's, ledges forming a regular star. *Shou-chou region*. Diam. 13.2 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Yen'ü fig. 25.

- C 41. Pl. 15. Square central band, from the sides of which projects a quatrefoil; striped commas on a granulated ground; four slanting T's; from the rim four more petals. *Shou-chou region*. Diam. 9.1 cm. Hellström collection.

A mirror similar to the preceding, but top lines of the T's parallel to the sides of the square central band. *Shou-chou region*. Yen'ü fig. 17.

- C 42. Pl. 16. Round central field, without band, quatrefoil with the petals overlaid with raised circles; striped commas on a granulated ground; four slanting T's. *Shou-chou region* (Ku-shi hien). Diam. 9.5 cm. Hallwyl collection. Umehara, Seikwa 4: pl. 14 b.

- C 43. Pl. 16. Round central band, from which project five petals overlaid with circles in flat bands; striped commas on a granulated ground; five slanting T's, ledges extended to form a star. David-Weill collection. Umehara, Seikwa 4, pl. 20, and Kanizen pl. 10: 3. Same mirror in Kümmel, Gedächtnis pl. 45, there stated to come from the *K'ai-feng region*, Honan.

A mirror of the same kind, Yamanaka, Osaka, Umehara, Kanizen pl. 9: 5.

C 44. Pl. 16. Round central band, from which project six petals, which are decorated with slanting strokes interrupted by a double bow in the centre; six petals of the same kind from the rim, pointing inwards; striped commas on a granulated ground; six slanting T's, the ledges extended and forming a six-pointed star. *Shou-chou region*. T. Y. King, Shanghai.

A mirror of the same kind. *Shou-chou region*. Swallow pl. 18.

C 45. Pl. 16. Square central band, from the corners of which projects a quatrefoil; from the points of the petals, »stalks» ending in four new petals (as in C 26 above); striped commas on a granulated ground; four slanting T's. *Huei-hien, Honan*. Diam. 12.3 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region*. MFEA (K. 12.425).

A mirror of the same kind, fragmentary. MFEA (K. 11.033: 18).

A mirror of the same kind. Diam. 12.5 cm. Crown Prince collection.

A mirror of the same kind. *Shou-chou region*. Malmö Museum.

A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 19.

A mirror of the same kind, though décor zone somewhat smaller. Diam. 9.3 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region*. Diam. 9.2 cm. Hellström collection.

A mirror of the same kind; diam. 9.4 cm. Staatl. Mus. Berlin. Kümmel, Kunst pl. 44, b.

A mirror of the same kind. Imperial Household Museum, Tokyo. Umehara, Kanizen pl. 9: 2.

In the mirrors of this group there are slight variations in the comma pattern; otherwise the type is exactly the same.

C 46. Pl. 16. Quite the same type as C 45 above, with the exception that the petals have a border of slanting strokes, and the »stalks» also have slanting strokes (rope pattern) as in C 25, 27, 28 above. *Shou-chou region*. Diam. 11 cm. Hellström collection.

A mirror of the same kind; diam. 11.4 cm. Hellström collection.

A mirror of the same kind. *Shou-chou region*. Diam. »4 $\frac{1}{2}$ inches». Swallow, pl. 14.

A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 18.

A mirror of the same kind. *Ch'ang-sha region*. Yen'k'u fig. 16.

C 47. Pl. 17. Round central band, from which project four petals, in the shape of a »Mongol cap with ear-flaps», as in C 24 above; from the points of these, »stalks» ending in a new set of four petals of the same kind; striped commas on a granulated ground; four slanting T's; *Shou-chou region*. Diam. 13.5 cm. MFEA (K. 12.424).

A mirror of the same kind. »*Lo river valley*». White, Tomb tiles, ill. 28. Royal Ontario Museum. The same in Umehara, Kanizen pl. 10: 2.

C 48. Pl. 17. Round central band, from which project five petals, prolonged with »stalks», on which is a new set of petals; the field is thus divided into five panels, and right in the middle of these, corresponding to the outer petals afore-mentioned, are five more petals, connected by bands with the points of the inner petals; striped commas on a granulated ground; five slanting T's. Owing to the slanting type of the

T's, the position of the extra outer petals will be immediately to the side of the T stem. Oeder collection.

A mirror of the same kind. *Shou-chou region*. Swallow, pl. 17.

A mirror of the same kind. *Shou-chou region*. Yamanaka, Osaka. Umehara, Kanizen pl. 9: 6.

C 49. Pl. 17. Square central band, from the corners of which project four petals, »stalks», outer petals, extra petals in the middle of the four sections, connected by bands with the points of the inner petals — quite analogous to the scheme of C 48; four slanting T's; diam. 16.2 cm. Lagrelus collection.

A mirror of the same kind. Yamanaka, Osaka. Umehara, Kanizen, pl. 8: 1.

A mirror of the same kind, yet stalks and connecting bands having slanting strokes. *Shou-chou region*. Yen-k'u fig. 20.

C 50. Pl. 17. Quite the same type as the preceding, with the important difference that the outer petals on the stalks are here elaborated into complete quatrefoils. *Shou-chou region*. Diam. 14.3 cm. Hellström collection.

A mirror of the same kind. *Shou-chou region*. British Museum.

A mirror of the same kind, yet stalks and connecting bands having slanting strokes. *Shou-chou region*. Yen-k'u fig. 21.

C 51. Pl. 18. Square central band, from the corners of which project four petals, prolonged into »stalks», with outer petals, intermediate petals connected by bands with the points of the inner petals, just as in C 49; but on top of the outer »stalk» petals there are the curious »flail»-like figures which we had already in C 28 above; striped commas on a granulated ground; four slanting T's. *Shou-chou region*. Diam. 16.7 cm. Hellström collection.

A mirror of the same kind; diam. 18.4 cm. Cull collection. Yetts, *The Cull Chinese Bronzes*, pl. 24.

A mirror of the same kind, yet stalks and connecting bands having slanting strokes. *Shou-chou region*. Diam. 13.8 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region*. Yen-k'u fig. 22.

A fragmentary mirror of the same kind. MFEA (K. 10 599: 530).

C 52. Pl. 18. Similar to C 51, but the outer petals completed into quatrefoils, and the »flail»-like elements turned to the right. *Shou-chou region*. Yen-k'u fig. 23.

C 53. Pl. 18. The general idea of the décor scheme is cognate to C 51 but even more complicated: from the square central band there are eight petals, and these are continued not in the form of »stalks» but of interlaced bands connecting the inner and the outer petals; the same »flail» figures, slanting T's and striped commas and granulated ground. Jung Keng: *Ku king ying* pl. 10.

C 54. Pl. 18. Same disposition as the preceding, only the outer petals have been completed into quatrefoils. Winthrop collection. Umehara, *Seikwa* 4: pl. 19, and Kanizen pl. 8: 2.

C 55. Pl. 19. Round central band; décor zone with striped commas on a granulated ground; three slanting T's and three animals: a dog with collar and two deer; the

latter have the pear-shaped figures on their bodies which reveal an influence from the Ordos animal style of art (see Karlgren BMFEA 9, p. 102). Stated by Umehara to come from Lo-yang (Kin-ts'un find), though Karlbeck has had information to the effect that it has been unearthed in the Shou-chou region. Diam. 18.3 cm. MFEA (K. 12 219, gift of Mr. C. T. Loo), also in Umehara, *Seikwa* 4: pl. 21, Kanizen pl. 11: 1.

C 56. *Pl. 19.* Square central band, four slanting T's and four animals of quite the same type as the preceding; same commas and granulation. *Shou-chou region*. T. Y. King, Shanghai.

C 57. *Pl. 19.* Square mirror, starshaped central band; four animals (of which only a deer is clearly visible), with pear-shaped figures, of quite the same type as C 56 and C 57; striped commas and granulation. Moriya collection, Kyoto. Umehara, Kanizen pl. 11: 2; also in *Bijutsu Kenkyū* 1934, pl. 11.

C 58. *Pl. 20.* Round central field with only a ledge of slanting strokes, from which a quatrefoil with borders of slanting strokes; from the petal points, «stalks» that end in a kind of trident-shaped figure; striped commas on a granulated ground; four quite realistic birds, heads outwards. *Shou-chou region*. Diam. 11.6 cm. Lagrelius collection.

✓ C 59. *Pl. 20.* Big round central field with edge of slanting strokes; striped commas on a granulated ground; four birds, heads turned inwards, the bodies drawn out in a long sweep to the left. Diam. 12 cm. Lagrelius collection.

C 60. *Pl. 20.* Round central band; décor zone with striped commas on a granulated ground; four dragons with horned head, curled in and seen *en face*. The body is still essentially executed in the slightly concave band technique, though there is a tendency to raise the edges, and there is a ridge in the middle of the upper body and some faintly traced raised lines crossing the body in shallow curves. Diam. 15.2 cm. Sedgwick collection.

A mirror of the same kind. Diam. 15 cm. Lambert collection. Swallow pl. 595.

C 61. *Pl. 20.* Round the very small central field there is first a zone with striped commas and granulation, then a band with a ledge of slanting strokes; the principal décor zone again has commas and granulation and four dragons, looking backwards; edges of the dragon bodies slightly raised, and slightly curved cross-lines, on the long tails. Becker & Newmann, Köln.

A mirror of the same kind; diam. 13.5 cm. Lambert collection. Swallow pl. 596.

C 62. *Pl. 21.* Round central band; striped commas on a granulated ground; four dragons, with heads seen *en face*; besides the principal tail loop, a smaller loop on the lower side; the technique is now frankly that of a low flat surface bordered by a raised edge. Diam. 15 cm. Lambert collection. Swallow pl. 609.

C 63. *Pl. 21.* Square central band; décor zone with striped commas and granulation, and four dragons, with heads turned back, seen *en face*, farthest to the right, part

of the bodies adorned with a border of slanting strokes. (cf. C 59 above). *Shou-chou region*. Diam. 12.8 cm. Lagrelius collection.

A mirror of the same kind. Swallow pl. 48.

- C 64. Pl. 21. Round central band; striped commas on a granulated ground; five dragons with the head seen *en face* and one paw stretched out to the tail of the next; the technique of the animals the same as in C 62. *Shou-chou region*. Diam. 14.2 cm. Lagrelius collection.

A mirror of nearly the same kind (a slight difference in the drawing of the animals' heads); *Shou-chou region*. Winthrop collection. Umehara, Seikwa 4: pl. 16, and Kanizen pl. 13: 1.

A similar mirror (drawing of animals slightly more crude); *Honan region*. Diam. 16 cm. David-Weill collection. RAA 1934, pl. 55.

A mirror of nearly the same type as the preceding ones, only the animals' heads are turned down and gaping widely. Diam. 16.2 cm. Oeder collection. Umehara, Kanizen pl. 13: 8 (there called Priemern coll.).

A mirror of the same kind. *Shou-chou region*. Sedgwick collection.

A similar mirror in an Osaka collection, Umehara, Kanizen pl. 13: 2.

- C 65. Pl. 21. Similar to the preceding ones, but the tail drawn out in a long loop with several wing-like embellishments. *Shou-chou region*. Yen'ku fig. 30.

A similar mirror, but with the tail loop differently shaped. *Shou-chou region*. Yen'ku fig. 32.

- C 66. Pl. 22. Nearly the same type as C 64, only the animals' heads are held in a different position; the claws, gripping the tail of the next animal, are very realistic; round the central band there is a ten-pointed star, in the same technique of a raised line. *Shou-chou region*. O. Karlbeck collection.

A mirror of the same kind. *Shou-chou region*. Yen'ku fig. 31.

Mirrors of the same kind, Yamanaka, Osaka; Umehara, Kanizen pl. 14: 2, and 14: 3.

- C 67. Pl. 22. Round central band; background and animals like the preceding; round the central band an eight-pointed star, every second point ending in a petal of the «Mongol cap» shape (see C 24 above), and from the point of this, again, projects a «stalk» ending in a figure with a large hook to the right (cf. the tails in C 65 above). T. Y. King, Shanghai.

A mirror of the same kind, Harada collection, Osaka; Umehara, Kanizen pl. 14: 4.

- C 68. Pl. 22. Round central band, from which projects a quatrefoil with borders of slanting strokes; striped commas on a granulated ground; 4 quadrupeds with one front leg raised high; the circles on the bodies reveal influence from the Ordos animal style (see Karlgren BMFEA 9, p. 109); the raised line inside the rim breaks into the décor field in four places in the shape of bird's heads (eyes and beaks) — probably also an Ordos influence. Diam. 14.1 cm. MFEA (K. 12 214, gift of Messrs Sparks, London).

- C 69. Pl. 22. Round central band, décor zone with striped commas on a granulated ground and four fantastic animals, connected with lines, in the middle of which

are figures somewhat »wing«-shaped; (cf. 65 above); the bodies are in part adorned with slanting strokes. Diam. 16.7 cm. MFEA (K. 11290: 112).

- C 70. *Pl. 22.* General features the same as in the preceding, but the animals stylized so as to be almost unrecognizable, and the »wings« differently shaped. Musée Cernuschi.
- C. 71. *Pl. 23.* Round central band, striped commas on a granulated ground; connected figures closely resembling the »wings« in the preceding two (C 69, C 70) and certainly but a stylized and stereotyped version of the same fundamental décor idea. *Shou-chou region.* Diam. 13.8 cm. Lagrelus collection.
- C 72. *Pl. 23.* Round central band; commas and granulation; eight connected figures of which every second one is a strongly stylized bird, and every alternate one seems to be another variation of the »wing« motif of the preceding mirrors. Observe how some of the main lines run slantingly into the rim (outer side of the »wings«) and the central band (inner side of the birds), which gives the whole an impression of a rhythmic rotary movement. *Shou-chou region.* Yamanaka, Osaka. Umehara, Seikwa 4: pl. 18, and Kanizen, pl. 13: 4.
- C 73. *Pl. 23.* I have placed this unusual mirror here in spite of its lacking the comma pattern background, for its figures in the décor zone outside the round central band are birds alternating with »wing« figures, closely akin to the preceding mirror; the raised-edge technique is also the same. *Shou-chou region.* Diam. 16 cm. Lagrelus collection.
- C 74. *Pl. 23.* Round central band, from which a ten-pointed star; striped commas on a granulated ground; from this project, on short »stalks«, four petals, worked into a very debased and corrupted variation of the bird motif: a comparison with C 59 above will reveal the origin; the straight »wing« to the one side is still fairly intelligible; the long curve to the other side is transformed so as to end in a flower. *Shou-chou region.* Yen'ku fig. 33.

A very similar but not quite identical mirror. Diam. 13.5 cm. Lambert collection. Swallow pl. 510.

- C 75. *Pl. 23.* Closely akin to the preceding, but the original décor idea still more corrupted: round central band; striped commas (in part quite dissolved and corrupted) on a granulated ground; from the band, on short »stalks«, five big, somewhat heart-shaped petals; from these the remnants of the bird figures: the straight wing to the one side, touching the rim at an angle, the curved part to the other side ending in a flower; the bird origin would be unrecognizable but for the information given by C 59 and C 74 above. *Shou-chou region.* Diam. 13.7 cm. Hellström collection.

A mirror of the same kind. *Shou-chou region.* Diam. 13.7 cm. Lagrelus collection.

A mirror of the same kind; diam. 13.5 cm. Hellström collection.

A mirror of the same kind. *Shou-chou region.* O. Karlbeck collection.

Mirrors of the same kind. Yamanaka, New York, Seikwa 4: pl. 17, and David-Weill collection, Umehara, Kanizen pl. 13: 6.

- C 76. *Pl. 23.* Round central band; striped commas on a granulated ground; from the band project four heart-shaped petals, the upper parts of which are drawn out, in

a «cleft» way, into two bands which quite obviously betray their «bird» origin (quite closely allied to C 59 and C 74 above); the curved band (with slanting strokes), which bends to the one side, is adorned with an extra heart-shaped petal, loosely attached to the side of the curling end. *Shou-chou region*. Diam. 14 cm. Lagrelius collection.

A mirror of the same kind. Umehara, Kanizen pl. 13: 5.

- C 77. *Pl. 24*. Square central band; striped commas on a granulated ground; the petals, on thin and short «stalks», with borders of slanting strokes and rows of small circles, are slightly deformed by being worked into the debased bird shape, recognizable by comparison with C 59, C 74, and C 75; the long curved band to the one side is adorned with slanting strokes, and here the additional petal is not loosely and inorganically attached, as in C 76, but placed as the natural termination of the band, which serves as a «stalk» (like the flower in C 74). *Shou-chou region*. Diam. 13.2 cm. Lagrelius collection.

- C 78. *Pl. 24*. Round central field with only a ledge of slanting strokes; striped commas on a granulated ground; the principal décor is closely akin to the preceding, but the central petals are even more deformed, and the straight wing-quill to the one side is here replaced by yet another petal; altogether, the whole of this décor is quite unintelligible unless studied in the light of the preceding series: C 59, 74, 75, 76, 77. Diam. 11 cm. Crown Prince collection.

A mirror of the same kind. *Shou-chou region*. Diam. 11.3 cm. MFEA (K. 12426).

A mirror of the same kind. *Shou-chou region*. Yen'ü fig. 12.

- C 79. *Pl. 24*. Yet another simplification of the C 76 and C 77 schemes: round central field with ledge of slanting strokes; striped commas on a granulated ground; heart-shaped quatrefoil; the curved band of the preceding type that ends in a new petal is here modified into a more S-shaped band, pointing more directly towards the rim, and the wing-quill towards the other side has entirely disappeared. *Shou-chou region*. Diam. 11 cm. Lagrelius collection.

- C 80. *Pl. 24*. Small round central field with narrow ledge, from which projects a quatrefoil; décor zone with striped commas, most of them badly dissolved and corrupted, on a granulated ground (visible only in a few places); principal décor zigzag lozenge (half or complete), as extensively discussed on p. 30 above, and executed in the same technique — broad, slightly concave bands — as the slanting T's in preceding groups; in the outer field formed by the lozenges four more quatrefoils, and from the rim four petals, suggesting yet another set of quatrefoils. *Shou-chou region*. Diam. 11.7 cm. Crown Prince collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. *Shou-chou region*. British Museum.

A mirror of the same kind. *Shou-chou region* («Huai valley»). Lambert collection. Swallow pl. 619.

Three mirrors of the same kind. *Shou-chou region*. Yen'k'u figs. 26—28.

A mirror of the same kind. Diam. 11.3 cm. Crown Prince collection.

A mirror of the same kind. Swallow pl. 16.

In this group the disposition and execution of the commas vary, but for the rest the mirrors are of quite the same type.

C 81. Pl. 25. Quite closely akin to the preceding type; but the petals from the rim are here replaced by real quatrefoils, though one petal is invisible; the ground is divided into big squares by narrow bands of slanting strokes (rope-pattern). Yamanaka, Osaka. Umehara, Kanizen pl. 12: 4.

C 82. Pl. 25. Square central band; striped commas on a granulated ground; the zigzag lozenges of the preceding types are here deformed and combine to form compound stars. *Lo-yang region*. Diam. 11 cm. Lagrelus collection.

A mirror of the same kind; *Lo-yang region*. Diam. 13 cm. Lambert collection. Swallow pl. 621.

A mirror of the same kind. *Si-an region*, Shensi. Yen'k'u fig. 29.

A mirror of the same kind; diam. 9.7 cm. Mus. f. Ostas. Kunst, Köln. Kümmel, Gedächtnis pl. 44 a, Umehara, Seikwa 4: pl. 13 b.

C 83. Pl. 25. Same features as the preceding, but in addition there are petals, overlaid with raised circles (cf. C 42 above), at the four corners of the central squares, and similar circles as centres of six-pointed stars inserted in the lozenges. T. Y. King, Shanghai.

A mirror of the same kind. Yamanaka, Osaka. Umehara, Kanizen pl. 10: 5.

C 84. Pl. 25. Square mirror; central band in the shape of an eight-pointed star; striped commas on a granulated ground; deformed zigzag lozenge, as in C 82, in the corners trident-shaped figures, and at their sides, petals on short «stalks» projecting from the rim. Winthrop collection. Umehara, Kanizen, pl. 19: 6, also Bijutsu Kenkyū 1934, pl. 10.

C 85. Pl. 25. Square mirror; square central band; décor zone with striped commas on a granulated ground; principal décor made by bands that form squares, and circles marking their corners. These circles are surrounded by quatrefoils, so as to form exactly the same figures as in C 80 above. Diam. 11.2 cm. Lagrelus collection.

A mirror of the same kind. Yamanaka, Osaka. Umehara, Kanizen pl. 12: 5.

Before entering upon a discussion of the various groups in this great category, I wish to make a few remarks about some of the most prominent décor elements.

The slanting T's, which occur so frequently, have not originated in this category: they could not organically grow out of the primary elements belonging to the class. The fundamental background filling in the whole of this category is the comma pattern and the granulation, and these could never give rise to the slanting T's. Nor could the quatrefoil, a simple and natural embellishment of the central field or band, which

by extensions and variations has produced several curious new décor elements, ever result in a slanting T. The fact is, as already pointed out by Karlbeck (Karlbeck p. 23), that the slanting T's are due to an influence from quite another category, the D class, which we shall study below. There the interlocked T's, extensively discussed in our introductory chapter, are an important and regular background filling. From this class the big slanting T shapes have been borrowed and introduced into our present class. Some words of explanation are, however, needed to show how this has been possible. Let us

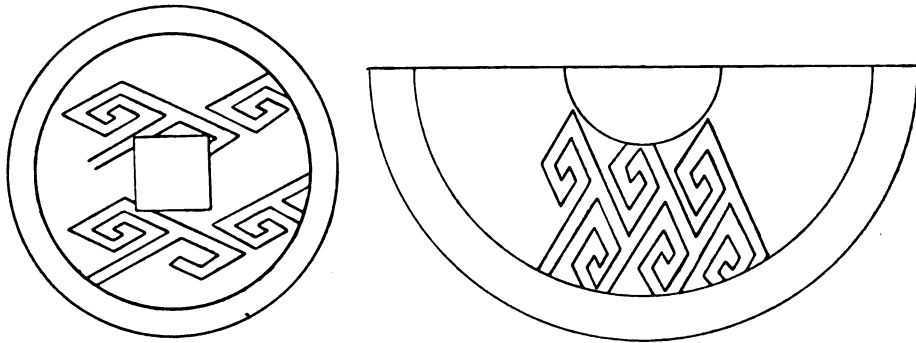


Fig. 13 a—b.

select two specimens of category D on which the interlocked T's background pattern is on a big scale. Our fig. 13 a here is a drawing of the background pattern of D 1 (pl. 26), and fig. 13 b gives a part of the background of D 5 (pl. 26). It is easy to realize how these striking T figures may have appealed to the imagination and been borrowed from one category (D), in which they organically belong as subordinate (background) pattern, to another category (our cat. C here), in which they originally had no *raison d'être*, and have here been promoted into the principal décor pattern. But how is it that they have been detached, so to speak, from their continuous interlocked scheme, and placed free, like a garland, a ring, all round the principal zone, with the stem always standing (slantingly) on the outer rim? Their original principle of a fixed position, which demanded that the stem should always be parallel either to another stem or to a top stroke (which in its turn serves as stem in a new T, see fig. 6 b), is abandoned, and the stems stand at an acute angle to one another (e. g. C 32, pl. 14). In order to understand this we may refer to a parallel case in this very category D from which the loan has been made. We have there, as we shall see in detail below, another fundamental background figure, the zigzag lozenge. This figure, while it first serves as a subordinate pattern, i. e. a background filling, has been detached, lifted up, so to speak, into a higher plane of relief and placed as one element of the principal décor scheme. We can study this best in our type D 30 (pl. 32, Crown Prince collection). There in the middle of the right side section we find, quite close to each other and absolutely parallel, one subordinate (background) zigzag lozenge, and one principal (elevated) zigzag lozenge. But

let us go one step downwards, to the bottom of the mirror: there we find the same subordinate (background) zigzag lozenge in its regular position, parallel to that at the side, in a continuous pattern, but at the same time there is that same zigzag lozenge lifted up to form an element of the principal décor, and then it is ruthlessly placed straight across the background lozenge, with a complete disregard of the continuous lozenge scheme of the background, as one of four big zigzag lozenges that are placed in a ring, running round the main décor field. Here we have an exact parallel to what the artist has done with the slanting T's of category C: they are no longer a detail in the continuous background scheme, they are independent, principal elements and can be placed athwart the bottom elements that are geometrically bound up with each other.

What has been said of the slanting T's: that they are not originally at home in category C (the comma-pattern class) but have been borrowed from category D, is, of course, equally true of the zigzag lozenge, as an element of the principal décor, in mirrors like C 80 and the following. It is a loan from the same source, category D, where, as we shall find, it has originated and plays a very prominent part. Further, there are the few examples of pointed stars (C 57, 66, 84); they play a very modest part in this category, whereas they are a frequent and fundamental element in category D, and it is almost certain that our few examples here in C are due to influence from category D.

In the historical placing of our great category C it is important, as a point of departure, to keep in mind that it is essentially a Shou-chou region category, which means that it is, above all, a product of the art of the Ch'u kingdom. It is obvious that Shou-chou cannot have been the sole centre, in the Ch'u kingdom, where these classes of mirrors, here concentrated into one big category (C), have been cast; on the contrary, there must have been a great many Ch'u cities in which the Ch'u art flourished, and we have already mentioned that category-C mirrors have been unearthed as far South as in Ch'ang-sha. But the Shou-chou region (the Huai valley region) happens to be the only great Ch'u centre from which we possess a great number of mirrors with known provenience, and therefore Shou-chou offers us a good opportunity of studying the evolution of the Ch'u mirrors in its consecutive stages, as attested in one and the same centre. Indeed, all the sub-categories recorded above offer specimens that are known to come from the Shou-chou region:

a. Mirrors with only comma pattern in the principal décor zone: Shou-chou provenience 6 cases (C 3, 6, 12 a—c, 15 b). In this sub-category we have likewise 4 specimens of Lo-yang region provenience (C 4, 9 b, 13, 15 a), and 1 (C 14) from Huei-hien, Honan.

β. Mirrors with comma pattern (or kindred pattern) in the principal décor zone and a quatrefoil outside the central band (or field), either simple or prolonged into stalks and new embellishments (petals or quatrefoils) further out: Shou-chou region provenience in 19 cases (C 16 a—c, 17 a, b, 19 a, b, 20 b, 21, 23 a—c, 24 a—c, 26—28, 30). In this sub-category I know of no specimens with a Lo-yang region provenience.

γ. Mirrors with comma pattern (or kindred pattern) in the principal décor zone and slanting T's, without further embellishments: Shou-chou region provenience in 4 cases (C 32, 34, 35, 37). 1 specimen with a Lo-yang region provenience (C 36).

δ. Mirrors with comma pattern in the principal zone and slanting T's, and with quatrefoils in the centre, either simple or prolonged into «stalks» and new embellishments (petals or quatrefoils) further out, or animals in between (we leave out C 55 as being uncertain): Shou-chou region provenience in 27 cases (C 39, 40 a, b, 41 a, b, 42, 44 a, b, 45 b, e, f, h, 46 a, c, d, 47 b, 48 b, c, 49 c, 50 a, c, 51 a, c, d, 52, 56). In this sub-category I know of 1 specimen from the Lo-yang region (C 47 b), 1 from the K'ai-feng region, Honan (C 43 b) and 1 from the Huei-hien region, Honan (C 45 a).

ε. Mirrors with comma pattern in the principal décor zone with or without quatrefoils or petals, and with animals (birds, dragons etc.) and debased forms (remnants) of animals: Shou-chou region provenience in 21 cases (C 58, 63, 64 a, b, e, 65 a, b, 66 a, b, 71—74, 75 a, b, d, 76 a, 77, 78 b, c, 79). In this sub-category I know of only one specimen with a Loyang region provenience (C 64 c).

ζ. Mirrors with comma pattern in the décor zone and zigzag lozenges (and kindred elements) as principal element: Shou-chou region provenience in 5 cases (C 80 a—e). In this sub-category there are 2 specimens (C 82 a, b) from the Lo-yang region and 1 from Si-an.

Taken as a whole, our category C, the «comma pattern» category, has 82 specimens which we know come from the Shou-chou region (Huai valley region), and 10 specimens from the Lo-yang, K'ai-feng and Huei-hien, i. e. Honan regions.

Whether the 10 specimens from the Honan area mean that some Honan workshops really produced mirrors of the Ch'u kingdom types, side by side with the quite different category D types, which we shall study below, or whether these 10 specimens are due to trade between the Ch'u kingdom and the *Chung-kuo* «Central Kingdoms» round the middle course of the Yellow River, it is hardly possible to determine. I am inclined to believe that at the earliest stage (our subcat. α) — quite simple comma pattern mirrors with no other embellishments — there may have been a mirror industry identical in both centres (we have 6 α mirrors from the Shou-chou region and 5 from the Honan region), and that the differentiation between the two centres commenced only after this primary stage: then Lo-yang abandoned the comma pattern and went in for quite other types (cat. D below), whereas Shou-chou kept to the comma pattern and developed it, throughout a very long period, in the infinite variety and richness which we have just witnessed in our numerous examples above. But this can be no more than a working theory, as long as we have no more than 11 specimens with known provenience from the primary α sub-category to go upon; they are not sufficiently numerous to allow of any definite conclusion. The one positive fact remains that we can ascertain a flourishing mirror art in the Shou-chou region workshops, which runs all through the long evolution exemplified in our category C 1—85.

In our earlier study of other bronzes than mirrors (see p. 33 above) we have seen that the comma pattern, in one or other of its numerous variants, can be proved to have existed from the 6th c. B. C. (oldest datable examples one of the Piao pien chung, 550 B. C., and the Ch'ou-er bell, circa 535 B. C.) down to the reign of Yu-wang of Ch'u (237—228 B. C.). It is very improbable that the comma-pattern mirrors should have died out long before the comma pattern died out in other classes of bronzes, and we may therefore, *a priori*, be reasonably sure that one form or other of comma pattern mirrors existed as late as the 3rd c. B. C.

On other hand, it is by no means certain that the comma-pattern mirror lived on quite to the end of the comma-pattern décor generally: it may very well have been ousted by other types of mirrors a decade or two before the time of Yu-wang; it would be a much too rigid and dogmatic argumentation to say that because a Kuei of Yu-wang's time had the comma pattern, the Yu-wang era must also have produced comma-patterned mirrors. We must be cautious and simply say that the Yu-wang vessel shows the comma pattern to have been a living décor element right down to the latter half of the 3rd century, and that the comma-pattern mirrors in their final stages cannot be separated from this period by any very great length of time. There are, indeed, certain facts which suggest that the comma-pattern mirror did not last quite down to the unification of China by Ts'in Shih huang-ti (221 B. C.), but that it died out some decades earlier. We shall see below (we must anticipate here the results of our subsequent investigation) that there is another great category of mirrors, our cat. E, which is just as indissolubly connected with the Shou-chou region as our cat. C here, and this has to be chronologically placed. On the one hand, as we shall find, this cat. E is closely akin to the cat. F which we have established by epigraphical criteria to belong to the 2nd c. B. C. (early Han era); on the other hand, it is undoubtedly earlier than the F category, and must be of pre-Han date (this will be shown in detail further below); indeed, we shall find that it has to be placed as the last stage of the Shou-chou mirror art before the Han era. This does not mean that it was created shortly before 202 B. C. We have already pointed out that the period of wars and anarchy between 210 (the death of Ts'in Shih huang ti) and 202 (the final triumph of the Han) could not possibly have ensured the birth of a new, rich and varied class of mirrors; the beginning of category E must be anterior to 210 B. C. And since the decade of supreme Ts'in reign (221—210) is much too ephemeral a period for such a creation as the great category E — an entirely new style and different from the C mirrors, as we shall see, both in regard to the background patterns and to the principal décor — we must conclude that category E represents, above all, the Ch'u mirror art during the final period of glory of Shou-chou, when it was the Ch'u capital (241—222 B. C.), though it may reasonably have lingered on also through the following decade down to ca. 200 B. C.

This brings us back to our principal theme at present, the final limit of category C, the comma-pattern class. The question is this: did the comma-pattern mirrors continue and flourish in Shou-chou side by side with the new E category mirrors, or did they become obsolete and die out quickly after the introduction of this

new mirror style? In other words, were the C mirrors ousted by the E mirrors in Shou-chou?

If they were not, if the two categories C and E flourished side by side in the Shou-chou region during the latter half of the 3rd c. B. C., we should expect to find a certain number, at least, of mixed-style mirrors, products showing features of both the C and the E style. Such a reciprocal influence may be imagined in two different ways. Either we should find specimens in which the background of the C mirrors (comma pattern) is combined with the principal décor of the E mirrors (stylized dragons of the type peculiar to category E, see pls. 39—50 below); or we should find specimens in which the background of the E mirrors (principally the volute-and-triangle) is combined with the principal décor features of the C mirrors (slanting T's, animals and remnants of animals as in mirrors C 58—C 79, or big bands forming zigzag lozenges right across the mirror, as in C 80). But as far as I am aware, there are no examples at all of such a mixed style. This seems to exclude the possibility of a prolonged coexistence at Shou-chou, and therefore probably in the Ch'u art generally, of the two categories C and E. It is a probability bordering on certainty that category C, the comma-pattern mirrors, died out very soon after the birth of the new category E.

The approximate date for this ousting of the comma-pattern mirrors is hardly open to doubt. We have already emphasized that they cannot very well have died out long before the expiration of the comma pattern generally in other classes of objects (ritual bronzes, carriage fittings etc.), where it was maintained down to the collapse of the Ch'u realm (attested in Yu-wang's reign 237—228 B. C.). We have also asserted, with reference to our detailed examination below, that the mirrors of category E must have been a product of the period when Shou-chou was the Ch'u capital (241—222). What is more natural and plausible than to conclude that the comma-pattern mirrors (C) in their latest phases lived down to the middle of the 3rd c. B. C., and possibly even for a decade longer, about 240, and then had to give up the field when the newly-created mode of the E mirrors swept in and became victorious in the Shou-chou region and the Ch'u province of culture? Roughly speaking, we may take the middle of the 3rd century B. C. (250—240 B. C.) as the final limit of category C.

The beginnings of category C are more difficult to determine. We are helped only to a very modest extent by the Kin-ts'un find. One of the early types of the C mirrors (sub-category *a*, only a comma pattern filling the principal décor zone, without any other elements) is represented by a mirror deriving according to both White and Ume-hara from the Kin-ts'un tombs (our specimen C 13, pl. 10). Since it has the same square central band as other similar specimens known to come from the Lo-yang region (e. g. C 4), I see no reason whatever to doubt this information regarding its provenience. Now I have shown elsewhere (BMFEA 10, p. 74—81) that the Kin-ts'un tombs have to be dated in a period roughly determinable as ca. 450—ca. 230 B. C. (there is a long series of graves, which are certainly not all of the same generation). The Piao bells cannot, in any circumstances, be older than 550 B. C. They were not made for immediate burial,

as shown by their inscriptions¹, and cannot very well have been buried earlier than a few generations after their casting, say around 450 B. C. But this does not give any real dating for the graves. On the one hand, if the Piao bells cannot have been buried earlier than ca. 450, they may very well have been buried later, say 350, or 300, or 250; on the other hand, supposing they were really buried at the earliest date theoretically possible, ca. 450, then there is nothing to indicate that they were not laid in one of the later graves of the series, and that the earlier ones go back, for instance, to 550 B. C. Thus, the Piao bells form an important *point d'appui*, but only in combination with other materials: the numerous objects in the tombs with incised inscriptions, all of which have a script form later than that of the 6—5th centuries (as known from ritual vessels) and typical of the period of the Warring States (ca. 450—221 B. C.)². It is this last consideration in combination with the testimony of the Piao bells that forms the basis of my dating of the Kin-ts'un tombs in the period ca. 450—ca. 230 B. C.

Our Kin-ts'un mirror (C 13) of simple α type of cat. C thus cannot very well have been buried earlier than about 450 B. C., but in principle it may very well be later and belong to one of the later graves in the series. We therefore have to leave the Kin-ts'un criterion and turn to other arguments.

We have seen that the comma pattern is known from datable specimens from 550 (Piao bells) and ca. 535 (Ch'ou-er bell) B. C. down to Yu-wang's time (237—228). Just as we emphasized above that it is not reasonable to assume that the comma-pattern mirror ended *long* before the comma pattern generally died out, so we have here every reason to state that there is no reason whatever to believe that the comma pattern had existed for centuries before it was applied to mirrors — since we know from texts that mirrors existed already in the 7th c. B. C. On the contrary, we have every reason to conclude that the earliest and simplest types of comma-pattern mirrors go as far back in time as the earliest datable ritual bronzes with comma pattern, i. e. the 6th century. This conclusion is confirmed by a general computation of probability. The typological series inside our category C is very long and complicated: there is, as we have been able to testify, an infinite variety of sub-categories and variations, and very often we can clearly discern the chronological sequence; a good example is the petal: first the central field or band is bare, then it is adorned with a simple petal (quatrefoil), then this is elongated into a «stalk» with an additional petal, and this again is embellished with a «flail»-like element, and so on. We shall revert presently to an analysis of the typological sequence inside the category. Here it is important to emphasize that this long evolution cannot very well have been passed through in a few decades, not even in a century. In ancient China the evolution of art was slow, deliberate and conservative. The Middle Chou style reigned, little altered, for some 300 years; the Huai style as a whole for some 400

¹ Karlgren: BMFEA 10, p. 76—77.

² Whether the inscribed vessels of Yu-wang of Ch'u were buried immediately or at any rate soon after his death in 228 B. C., because of the impending catastrophe that soon annihilated the Ch'u kingdom, or whether they were interred later, in the 2nd c. B. C., when Shou-chou was still an important city, is not clear, since the tombs (or the cache?) where they were found was not scientifically excavated.

years. Is it then unreasonable to assume that the big class of mirrors, built on that much-favoured Huai-style element, the comma pattern, in all its rich variety and its long typological evolution, had practically as long a lifetime as the comma pattern on ritual vessels? Why should we hesitate to place it over the 300 years period ca. 550—ca. 250?

We can now revert to the simplest type of comma-pattern mirrors, sub-category *a*, and treat it with greater precision. We have registered 25 mirrors of 15 different types (C 1—C 15). Out of these, 10 specimens (C 1, 4, 6, 7, 10, 11 a, b, 12 a—c) have the primitive flat rim, which we have studied in cat. A above, where it occurred on very ancient and primary mirrors; the remaining 15 specimens have the concave rim, which is the rule (whithout a single exception) in all the typologically later sub-categories in class C, and which always obtains in the later Shou-chou categories E and F. Now, among these 15 specimens with concave rim is the Kin-ts'un mirror, which for other reasons we concluded was not buried anterior to ca. 450 B. C. This all tallies very well: the sub-category *a*, the primary and most simple class inside the C category, having nothing but a comma pattern in the décor zone, started with the ten specimens with primitive flat rim in the 6th century and early 5th century (approximately the time of the comma-patterned Piao bell, the Ch'ou-er bell and the Fu-ch'ai basin), and continued with the 15 mirrors with the more advanced concave rim down through the 5th century B. C.

This first phase of the comma-pattern mirrors is attested, as we have said above, by specimens both from the Shou-chou region (6 specimens) and from the Honan region (5 specimens). After this, the Honan region developed along quite different lines in the mirror art, and the very few comma-pattern mirrors of later sub-categories found in Honan are best explained as imported commercially or as booty from the Shou-chou region.

It was, in fact, in Shou-chou (and probably in Ch'u generally) that the comma-pattern mirror passed through its long and brilliant evolution in the 5th—3rd centuries B. C., which we must now investigate more closely.

It is hardly possible to give an exact dating of the sub-groups within these time limits; the most we can do is to establish typological series and attribute approximate dates to them. The first step, from the primary simple *a* type, is the adornment of the central field or central band with a quatrefoil. The first appearance of the quatrefoil in Chinese bronze art is difficult to date. We get the quatrefoil on various vessels of the Li-yü find (e. g. BMFEA 6, pl. 35: 5, Umehara, Senkoku pl. 3: 1), on small inlaid bronzes of the Kin ts'un find (White, Tombs pl. 6, 7), and, e. g., in the centre of the lid of a magnificent Ting tripod in high Huai style (Umehara, Senkoku pl. 31, Mrs. Holmes coll., New York), which has the body surface decorated and is thus datable in pre-Han time (as proved above). Again, we have the quatrefoil in a highly stylized and sophisticated form on the famous inlaid Hosokawa mirror from Kin ts'un¹ (Umehara Rakuyō pl. 48).

¹ This mirror is not included in our present investigation, since it is atypical, quite unique and not belonging to any of the ordinary mirror categories.

Thus the pre-Han existence of the quatrefoil is well documented. But on ritual bronzes it seems to be extremely rare, and I know of no datable specimen which could give a date for its early appearance.

The mirrors with this first elaboration of the simple décor scheme of the primary α type — the addition, in the décor field, of quatrefoils — are surely to be placed after the primary type, i. e. in the 4th century. This is emphasized by the fact that in the quatrefoil groups there is not, to my knowledge, a single example of the early flat rim. The quatrefoils, however, show a considerable variation: some are very small, modest and simple, others are large, elaborate, even pretentious, extending throughout the décor field; one device for running through the entire field was, as we have seen, to add a »stalk» to the apex of the petal and to let it terminate in a new petal (e. g. C 26). This stylistic evolution from simplicity to sophistication has surely required a considerable time, and we may assume that it filled the 4th century, the simplest forms with small and modest quatrefoils belonging to the early part of that century, and those with the more complicated and overloaded quatrefoils (C 19, 22), as well as those with »stalks» and outer petals, belonging to the later part of the 4th century. Of course no fixed data are here possible, and the safest course is to assign the whole group, without too fine distinctions, to the 4th c. B. C.

The evolution, however, continued and brought about quite weird and baroque results. On the one hand, there are mirrors like C 28 with the fantastic »flail» figure on top of the outer petal. On the other hand, the fundamental principle: that the whole mirror décor should be grouped round the central field and band as a strongly dominating centre, is relaxed and to some extent given up (e. g. C 30) by elaborating the peripheral elements into independent quatrefoils, competing, so to speak with the central one; the whole field is now more like a »carpet pattern», continuous rather than centred in the knob. These various further deviations from the original simple scheme must necessarily be later than the mere central quatrefoil type (with or without »stalks»), and with them we reach the furthest end of this evolutionary series, the time when the comma mirrors are coming to an end. They have therefore to be placed in the 3rd c. B.C., probably, as we have shown above, the 1st half of the 3rd century.

We revert, however, to the early 4th century in order to study another and parallel line of evolution. The primary, simple mirrors of type α (solely comma patterns in the décor zone) could be embellished in another way than by adding the quatrefoils: the artist borrowed the slanting T's from category D (of the Lo-yang region, as we shall find presently) and applied them as principal décor element over the commas as background. This was a very simple first step (e. g. C 32 ff.), and it could easily be combined with the quatrefoil embellishment (C 39 ff.). In some isolated cases (C 55, 56) beautifully drawn and realistic animals are inserted instead, and, just as in the simpler mirrors of the preceding group, the petals could be elongated into »stalks» and outer petals (C 45 ff.). And finally these embellishments could be exaggerated, the mirror décor overloaded: exactly as in the preceding group, the »flail» could be added on top of the outer petals (C 51 ff.), new sets of outer petals in the interstices could be added, and

joined through gracefully curving bands (C 48 ff.), and peripheral quatrefoils cropped up (C 50). The parallelism between these groups is perfect, apart from the slanting T's, and there is every reason to believe that they are quite parallel in time: mirrors with slanting T's only and those with small and modest quatrefoils are to be placed in the earlier part of the 4th century, those with «stalks» and outer petals in the latter part of the 4th century, and those with «flails», extra sets of petals in the interstices, and peripheral quatrefoils in the first half of the 3rd century.

Once more, however, we revert to the early part of the 4th century to discuss yet another — a third — way of elaborating the comma-pattern mirror from its simplest form (type *a*, only comma pattern filling in the décor zone) into higher artistic perfection. Instead of adorning it with more or less embellished quatrefoils, or with slanting T's, or with both, the décor field could be filled with animal figures. This idea, just as the slanting T's, may have been due to an influence from category D (Lo-yang class), as we have already pointed out. And the animals were placed, to the number of four, in a circle, just as in category D; the technique, at first identical with that of the D class: a flat relief, soon passed on to low, flat sheets delimited by raised edges. There were birds, dragons and other fantastic animals; and the bird figures were finally stylized and deformed so as to be quite unrecognizable. In the earlier phase of this evolutionary series the central band was seldom adorned with any quatrefoil, only rarely with a modest and unobtrusive pointed star; but in the later phase the quatrefoil petals crop up, weirdly worked into the remnants of the debased bird pictures. It is obvious that the earlier phase with clear and unadulterated animal shapes has to be placed parallel to the earlier phase in the preceding groups, i. e. the 4th century B. C., whereas the corrupted and decadent forms belong to the first half of the 3rd c. B. C.

There is finally the last small group of specimens which, instead of borrowing the idea of the slanting T's or that of the animals from category D, have borrowed the zigzag lozenge of that same category, and in some cases corrupted this figure considerably; that the group is late (3rd century) is revealed by the decentralized quatrefoils that often adorn it. This same element places the last mirror, C 85, in the same period.

CATEGORY D.

In this category there are no examples of the primary flat rim. Either the décor zone is delimited by a starshaped line, sometimes with a narrow and low ledge, and the remaining surface of the mirror runs out quite flat to the edge; or there is a concave rim, with the outer part low and flat (see our fig. 11 b above), not raised to form a high ridge as in category C above, and never ending in a sharp edge, as it often did in that category. This once stated, we shall not repeat it in the descriptions of the individual mirrors below. Here, as in the preceding category, the rim as well as the central band is often set off by a narrow ledge. There are three background patterns which recur very often in this category, and since I cannot repeat the detailed definition of them under

each mirror, but have to indicate them by a summary denomination, I shall give in advance here an exact description:

»Interlocked T's«. This type, as seen, e. g., in D 5, D 16, consists of the interlocked T's pattern discussed at length in the introductory chapter above, so formed that the T's are filled with triangular spirals, and the bottom by granulation; or rather, since the bottom at the same time obtains the interlocked T's form, the whole may be said to be an ambiguous, positive-negative pattern, either the triangle-filled T's being considered as the principal and the granulation-filled as the subordinate pattern, or vice-versa.

»Granulation-bordered zigzag lozenges«. This type, seen, e. g., in D 3, consists of the zigzag lozenge pattern, fully analysed as to origin and formation in the introductory chapter (p. 29—31), executed in such a way that the zigzag lozenge is bordered by a band, which contains a granulation line, the interior of the zigzag lozenge being filled with the volute-and-triangle pattern.

»Lozenges with spirals and granulation«. This type, as seen, e. g., in D 44, consists of ordinary lozenges (not zigzag-sided), often combined into big squares¹. They are bordered not by a filled band but by a simple line, and the interior of the lozenge is filled with granulation, into which are inserted spirals, often S-shaped.

D 1. Pl. 26. Square central band; in the décor zone a background of interlocked T's (as described above) and four figures, two animals and two human figures wielding long swords. Umehara, Seikwa 4, pl. 47 a, Kanizen pl. 15: 6. Winthrop collection.

D 2. Pl. 26. Round central band; central field as well as the background of the décor zone has granulation-bordered zigzag lozenges; in the décor zone four dragons (heads outwards) with widely gaping jaws and with teeth showing. Owner unknown to me.

D 3. Pl. 26. Round central band; the small central field as well as the background of the décor zone has granulation-bordered zigzag lozenges; three dragons (heads inwards), with open jaws and teeth showing, one front leg raised high above the head; bodies adorned with circles — an Ordos influence (Karlgrén, BMFEA 9, p. 109). This specimen is useful for the study of the dragons in this and the following categories: the up-turned upper lip together with the upper front-teeth form a kind of »forked« figure; and the down-turned lower lip and the corresponding teeth form another peculiar line. On mirrors on which the drawing is less elaborate this will result in

¹ If I say that in a mirror like D 44 there are not squares divided by diagonals into triangles and filled with spirals and granulation, but lozenges combined into bigger squares, it is because in this class we can witness the birth of the simple lozenge out of the zigzag lozenge. In D 7 and D 8 the granulated band of the zigzag lozenge has been simplified into plain lines, and the zigzag of the sides is reduced to a minimum, almost to the point of disappearing altogether. Here we seize the simple lozenge on the point of being produced by the simplification process. Therefore, I believe, the lozenge is the fundamental unit, and several lozenges combine into squares: in D 44 it is not the big square that is primary and afterwards divided up into triangles.

summary figures like those of D 5, in which it is important to recognize what the forked or zigzag elements really represent. Diam. 11.2 cm. MFEA (K. 11.071: 70).

D 4. A mirror almost identical with the preceding, but the central band adorned with running spirals. Moriya collection, Umehara, Kanizen pl. 17: 4.

D 5. Pl. 26. Round central band; central field as well as décor zone has interlocked T's; three gaping dragons (heads outwards), one of them with one front-leg lifted high above the head, tails adorned with fork-, wing- and plume-like elements (the fork-like detail is also a kind of wing, cf. D 17 below); circles and pear-shaped figures on the bodies — an Ordos influence (Karlgrén, BMFEA 9 p. 102, 109). *Shou-chou region*. Diam. 14.3 cm. MFEA (K. 10.599: 550). Also in Umehara, Seikwa 4: pl. 32, Kümmel, Kunst pl. 29 b.

A mirror of the same kind; *Lo-yang region*. Diam. 14 cm. Lagrelius collection.

A mirror of the same kind; *K'ai-feng region*, Honan; Diam. 14.5 cm. Kunstindustrimuseum, Copenhagen. Kümmel, Gedächtnis pl. 37, BMFEA 6, pl. 42.

A mirror of the same kind; *K'ai-feng region*. Yen'ü fig. 34.

A mirror of the same kind; C. T. Loo, Paris. Umehara, Kanizen pl. 19: 1.

D 6. Pl. 27. Quite like the preceding, except for the starshaped margin; diam. 14.5 cm. Eumorfopoulos collection, Yetts, Eum. Cat. II, pl. 7.

D 7. Pl. 27. Small round central field, around which is a flower of eight petals; background filled with zigzag lozenges containing volutes-and-triangles, but with no border band as in D 3 above; the three dragons quite similar to those of D 5—D 6. *Lo-yang region*. Diam. 11.7 cm. Hellström collection.

D 8. Quite like the preceding, but for a starshaped margin. Sirén collection.

D 9. Pl. 27. Round central band; décor zone and central field have granulation-bordered lozenges filled with small striped squares (very unusual; textile pattern?); three violently twisted dragons and three winged and horned human figures (demons?). Yen'ü fig. 48.

D 10. Pl. 27. Round central band; the central field as well as the décor zone have granulation-bordered zigzag lozenges; four antithetical birds (heads outwards). *Lo-yang region*. British Museum.

A mirror of the same kind; *Lo-yang region*. Kümmel, Gedächtnis pl. 40 b.

A mirror of the same kind; *Lo-yang region* (Yen-ling). «Diam. 4 inches». Swallow pl. 6.

A mirror of the same kind; Mus. of Fine Arts, Boston. Umehara, Seikwa 4, pl. 28 b, and Kanizen pl. 15: 4.

D 11. Pl. 28. Round central band; both central field and décor zone have interlocked T's; three dragons (heads outwards) with long necks and the big body stylized into a kind of lozenge shape; on the tail, fork and plume embellishments, similar to those in D 5 ff. Diam. 15.6 cm. Oeder collection.

A mirror of the same kind; *Lo-yang region*. Lambert collection. Swallow pl. 530.

A mirror of the same kind; Museum of Fine Arts, Boston. Umehara, Seikwa 4: pl. 31, Kanizen pl. 19: 2.

A mirror of the same kind; Kümmel, Gedächtnis pl. 39.

- D 12. Pl. 28.** Starshaped central band; both central field and décor zone have interlocked T's; three dragons (heads inwards), recalling the preceding (D 11) but different, especially in regard to the tail, which extends in a long line that touches the breast of the next dragon; diam. 14 cm. Lagrelius collection.
- D 13. Pl. 28.** Square central band; central field and décor zone have interlocked T's; four bird-dragons (the back outwards), the tails of which have the same embellishments (fork-, wing- and plume-like elements) as D 5 above; bird-head bent down, wings symmetrically spread out. Museum f. Ostas. Kunst, Cologne. Sinica 1932, pl. 8: 7.
- D 14. Pl. 28.** Round central band; central field and décor zone have interlocked T's; three dragons (the back inwards), violently twisted, head curled in, hind legs spread out wide, a long plume from the breast going out to the left and the tail to the right counterbalance each other. Owner unknown to me.
- D 15. Pl. 29.** Round central band; the background has granulation-bordered zigzag lozenges, otherwise quite like the preceding. Hosokawa collection. *Lo-yang region* (Kin-ts'un find). Umehara, Rakuyō pl. 44 a.
 A mirror of the same kind; *Lo-yang region*. Swallow pl. 38.
 A mirror of the same kind; *Shensi*. Yen'k'u fig. 41.
 Mirrors of the same kind; Bidwell collection, Umehara, Kanizen pl. 20: 3, and a Tokyo collection, Kanizen pl. 17: 2.
- D 16. Pl. 29.** Starshaped central band; central field and décor zone have interlocked T's; four dragons of two kinds, those opposite each other identical; one pair has, furthest to the right, a gaping head with a curved crest, and the body goes in a bold loop, with a wing counterbalancing the elongated tail; the other pair is too incrustated to allow of a reliable analysis; *Lo-yang region*. Diam. 13.8 cm. Lagrelius collection.
- D 17. Pl. 29.** Round central band; central field and décor zone have granulation-bordered zigzag lozenges; three dragons (heads outwards) with gaping jaws, teeth showing, and the wing drawn out to the right, counterbalancing the tail to the left; the tail is also adorned with an extra pair of small wings (cf. the «fork» element on D 5 above, pl. 26). *Shou-chou region*. Diam. 10.5 cm. MFEA (K. 10 599: 552). Also in BMFEA 6, pl. 42, Umehara, Kanizen pl. 17: 1.
 A mirror of the same kind; *Cheng-chou region*, Honan. MFEA (K. 11 055: 7).
 A mirror of the same kind; *Lo-yang region* (Kin-ts'un find). White, Tombs pl. 50.
- D 18. Pl. 29.** Round central band (with a border of slanting strokes), and rim, otherwise the same as the preceding. *Lo-yang region*. Staatl. Mus., Berlin.
- D 19. Pl. 30.** Large bare central field, from which projects a quatrefoil; the décor zone has lozenges with spirals and granulation; four dragons (heads outwards) with widely gaping jaws, teeth showing, tail and wing bending out symmetrically in opposite directions; diam. 22 cm. Calmann collection. Also in The Chinese Exhibition, pl. 33.
- D 20.** Very similar to the preceding, but dragons placed antithetically, two and two, and petals somewhat broader. Yamanaka, Osaka. Umehara, Kanizen pl. 17: 3.

- D 21. Pl. 30.** Round central band, from which project four broad, heartshaped petals with embellishing lines; décor zone has volutes-and-triangles; four dragons like those of 19, 20 above; rim of the concave and edged type. *Shou-chou region*. Yen'ku fig. 46.

A mirror of the same kind (minus the lines on the petals). Diam. 17 cm. Lambert collection. Swallow pl. 529.

- D 22. Pl. 30.** Round central band; décor zone has lozenges with spirals and granulation; the heartshaped petals are strongly stylized and worked into the tails of the dragons; the four dragons are of the same type as in D 19—21 above; rim of the concave and edged type. *Lo-yang region*. Yen'ku fig. 66.

A mirror of the same type. *Ch'ang-sha region*. J. H. Cox, *An Exhibition of Chinese Antiquities from Ch'ang-sha* (1939), frontispiece.

- D 23. Pl. 30.** Round central band, with quatrefoil fat and bulbous (heartshaped petals); décor zone has lozenges with spirals and granulation, and four bird-dragons (heads outwards), with head curled in and wing and tail counterbalancing each other. *Lo-yang region*. Diam. 18 cm. Lagrelius collection.

A mirror of the same kind; bought in *K'ai-feng*, Honan; David-Weill collection. Kümmel, *Gedächtnis* pl. 38.

A mirror of the same kind; *Si-an region*, Shensi. Yen'ku fig. 47.

A mirror of the same kind; Winthrop collection. Umehara, *Seikwa* 4: pl. 29, and Kanizen 18: 2.

- D 24. Pl. 31.** Square central band; central field and décor zone have interlocked T's (here the positive set have a filling of alternating round and triangular spirals, the negative granulation filling); the rim has a ledge of slanting strokes; four bird-dragons (feet inwards); the short wings hang down on either side, the tail is raised and cleft in two curves that counterbalance each other. *Lo-yang region*; diam. 13.3 cm. Lagrelius collection.

- D 25. Pl. 31.** A mirror of quite the same kind, except for the absence of the ledge of slanting strokes on the rim. *Lo-yang region*. Sedgwick collection.

Two mirrors of the same kind. *Lo-yang region*. Yen'ku figs. 44, 45.

A mirror of the same kind; diam. 13 cm. Staatl. Mus. Berlin. Kümmel, *Kunst* pl. 29, Umehara, Kanizen pl. 15: 5.

A mirror of the same kind; diam. 12 cm. Kümmel, *Gedächtnis* pl. 36 b.

- D 26. Pl. 31.** Round the knob, without any central field, a quatrefoil; the décor zone has interlocked T's and four bird-dragons of quite the same kind as D 24, 25 above. *Lo-yang region* (Kin ts'un find). Hosokawa collection. Umehara, *Rakuyō* pl. 44 b and Kanizen pl. 18: 1.

A mirror of the same kind; Mus. van Aziat. Kunst, Amsterdam. Diam. 18.2 cm. *Maandblad* 1934, p. 192.

- D 27. Pl. 31.** Round central band; central field and décor zone have granulation-bordered zigzag lozenges; through the décor zone a large figure, in broad, bare, slightly concave bands, which is really the petals of a quatrefoil moved out and enlarged;

in the petals are inserted four animals (bears?), outside the petals four dragons (two of them bird-dragons) with elongated wings and tails counterbalancing each other. *Lo-yang region* (Kin ts'un find). »Diam. 9.5 inches». Royal Ontario Museum. White, Tombs pl. 49. Umehara, Rakuyō pl. 47 a and Kanizen pl. 22: 1.

D 28. Pl. 32. Bands and background quite like the preceding, differing only in the décor fauna: inside the petals two pairs of bird-dragons (both with feet inwards), one pair (opposite each other) with the tail raised above the head and divided into long symmetrical curves, the other pair with the tail S-shaped, cleft at the end, raised above the head; outside the petals four quite realistic birds. Mrs. Meyer collection, New York. Umehara, Kanizen pl. 22: 2.

D 29. Pl. 32. Round central band, from which emanates a quatrefoil; the décor zone has a background-filling of volutes-and-triangles; the same wide band over the décor zone in modified quatrefoil form; inside the big outer »petal», and standing on the points of the inner petals, are four birds; outside the wide bands four dragons. Tsun kun chai collection, Peking.

D 30. Pl. 32. Square central band; the central field and décor zone have granulation-bordered zigzag lozenges; and then we meet here for the first time this zigzag lozenge raised up to a higher plane of flat relief and placed, in a series of four, all round the décor zone. We have already described above (p. 54) how these new principal décor zigzag lozenges are in some cases (top and bottom in the photo) placed ruthlessly athwart those of the background, in order to give the circular arrangement. Between them, four bird-dragons, with the long neck stretched straight to the left, and the tail, cleft at the end, raised behind the neck in a C-line to the right. *Lo-yang region*. Diam. 10.3 cm. Crown Prince collection.

D 31. Pl. 33. Square central band, in décor zone a background of lozenges with spirals and granulation; four zigzag lozenges, and four bird-dragons with necks stretched to the right. Observe the interesting fact that the zigzag lozenges of the principal décor are here quite independent, no longer having any basis in the background pattern, as in the preceding mirror. Diam. 11.4 cm. Oeder collection.

A mirror of the same kind. *Lo-yang region*. Yen'ku fig. 41.

D 32. Pl. 33. A mirror of quite the same type, but for one important difference: here the background is not the lozenges with spirals and granulation, but granulation-bordered lozenges (not zigzag lozenges) filled with volutes-and-triangles — an uncommon variant. Oda collection, Kyoto. Umehara, Kanizen pl. 16: 6.

D 33. Pl. 33. Square central band; décor zone with interlocked T's, principal décor with zigzag lozenges and bird-dragons of exactly the same kind as in D 31 and D 32; here again the zigzag lozenges have not »grown out» of the bottom, but are independent elements, carried over from types like D 30. *Lo-yang region*. Diam. 10.8 cm. Lagrelius collection.

A mirror of the same kind; *Lo-yang region*. Staatl. Mus. Berlin.

A mirror of the same kind; *Lo-yang region*. Diam. 9 cm. Lambert collection. Swallow pl. 534.

A mirror of the same kind; Bidwell collection. Umehara, Seikwa 4: pl. 27 a, and Kanizen pl. 16: 5.

- D 34. Pl. 33.** Square central band; central field and décor zone have interlocked T's; from the rim four incomplete zigzag lozenges (see p. 30 above), from the points of which emanate petals; four birds (feet inwards) with the tail raised high in a curve above the head; diam. 10.2 cm. Worch collection. Kümmel, Gedächtnis pl. 40 b.

A mirror of the same kind; Mrs. Chr. Holmes collection, New York, Umehara, Seikwa 4: pl. 27 b.

A mirror of the same kind; Umehara, Kanizen pl. 16: 4.

- D 35. Pl. 34.** Square central band; central field and décor zone have granulation-bordered zigzag lozenges (filled with volutes-and-triangles and granulation, the latter an unusual feature); from the corners of the central band four heartshaped petals, on the points of which stand four birds (or rather bird-dragons: they have ears). Staatl. Mus. Berlin. Umehara, Seikwa 4: pl. 28 a, and Kanizen pl. 16: 2.

- D 36. Pl. 34.** Square central band; central field and décor zones have granulation-bordered zigzag lozenges (with spiral and granulation filling); the décor zone is divided into two zones through a starshaped band in the middle; in the outer zone four zigzag lozenges and four bird-dragons; in the inner zone two pairs (differently shaped) of bird-dragons with enormous, curiously shaped, tripartite head crests; between them four small birds, with outspread wings, seen from above; a most unusual mirror. Oeder collection.

- D 37. Pl. 34.** Starshaped central band; the décor zone has granulation-bordered zigzag lozenges; the central band has eight points, from four of which emanate petals with a somewhat »harp«-shaped calyx; projecting from the points of these petals are »stalks«, ending in new petals, with a turned-down calyx; from the rim four incomplete zigzag lozenges, on the points of which rest bird-dragons. *Lo-yang region*. Diam. 11.4 cm. MFEA (K. 11 276: 108).

A mirror of the same kind; *Lo-yang region*. Diam. 10.5 cm. Lambert collection. Swallow pl. 518.

- D 38. Pl. 35.** Square central band; central field and décor zone have lozenges with spirals and granulation; four bird-dragons (feet inwards) with curled-in heads, and extremities cleaving and curling in; from the rim, four incomplete zigzag lozenges, on which stand birds; diam. 12.5 cm. Lagrelius collection.

A mirror of the same kind. Crown Prince collection.

- D 39. Pl. 35.** Starshaped central band; central field and décor zone have granulation-bordered zigzag lozenges with spiral and granulation filling; from the points of the stars emanate four large petals; from the rim incomplete zigzag lozenges, on which are four birds. *Lo-yang region*. Diam. 9.8 cm. Hallwyl collection. Hallwylska Saml. Kat. I E: 8.

A mirror of the same kind; diam. 9 cm. Staatl. Mus. Berlin. Kummel, Kunst pl. 44 a. Umehara, Seikwa 4: pl. 26 b and Kanizen 16: 1.

A mirror of the same kind. Mus. van Aziat. Kunst, Amsterdam. Diam. 9.4 cm. Maandblad 1933, p. 191.

D 40. Pl. 35. Similar to the preceding, but the background consists of interlocked T's and the petals have granulation-lined bands. *Lo-yang region*. Diam. 8.9 cm. MFEA (K. 12 427).

D 41. Pl. 35. Square central band; central field and décor zone have granulation-bordered zigzag lozenges; from the corners of the central band four long and pointed petals, with granulated borders; from the rim four petals with »harp»-shaped calyces (cf. D 37 above). *Lo-yang region*. Diam. 8.6 cm. MFEA (K. 12 428).

D 42. Pl. 36. Square central band; décor zone has lozenges with spirals and granulation; from the sides of the central band project four ordinary petals, and from the corners four long and pointed petals with granulated borders (like D 41); from the rim four more petals with »harp»-shaped calyces adorned with slanting strokes. *Lo-yang region*. Yen-k'u fig. 40.

D 43. Pl. 36. Square central band; décor zone with volutes-and-triangles; at the corners of the band are petals, from which project »stalks» with slanting strokes and new outer petals; from the rim four more petals, with »harp»-shaped calyces (simplified forms of the preceding); *Lo-yang region*. Earlier in the Lagrelius collection.¹

D 44. Pl. 36. Starshaped central band; central field and décor zone have lozenges with spirals and granulation; four peripheral quatrefoils; from the rim, four petals, with »harp»-shaped calyces with slanting strokes. *Lo-yang region*; Staatl. Mus. Berlin. This mirror is reproduced in Swallow pl. 41, and there stated to be from Shou-chou. But this must be a *lapsus calami*, for Swallow had previously given Karlbeck full details of this mirror as having come from the *Lo-yang region*.

D 45. Pl. 36. Square central band; central field and décor zone have granulation-bordered zigzag lozenges; from the corners of the band four petals with granulated borders; four quatrefoils out in the zone. A Japanese collection. Umehara, Kanizen pl. 15: 3.

D 46. Pl. 36. Round central band; central field and décor zone have granulation-bordered zigzag lozenges; four quatrefoils on a line with slanting strokes (rope pattern) in the middle of the zone; diam. 9.5 cm. Crown Prince collection.

A mirror of the same kind. Diam. $4\frac{1}{4}$ inches. Ingram collection. Weishui, *K'ai-jeng region*. Swallow pl. 7.

A mirror of the same kind. Museum van Aziat. Kunst, Amsterdam. Diam. 9.8 cm. Maandblad 1933, p. 191.

D 47. Pl. 37. Round central band; décor zone with granulation-bordered zigzag lozenges; from the band four long, pointed petals, and four ordinary petals, extended into »stalks» and outer petals. *Lo-yang region*. Diam. 6.7 cm. Hellström collection.

¹ A few mirrors in this collection have been lost through a misadventure; but since they are important typologically, I include photographs of them here.

A mirror of the same kind. *Cheng-chou region*, Honan. Buckens collection. Umehara, Seikwa 4: pl. 26 and Kanizen pl. 15: 2.

A mirror of the same kind. *Huei-hien*, Honan. Swallow pl. 45. A

- D 48. Pl. 37. Round central band; central field and décor zone have granulation-bordered zigzag lozenges with spiral and granulation filling; from the band four petals, extended into «stalks» and outer petals. Kyoto University, Umehara, Kanizen pl. 15: 1.
- D 49. Square central band and four small petals from the rim, for the rest quite like the preceding. *Ki-hien*, Honan, Yenku fig. 39.
- D 50. Pl. 37. Round the knob a quatrefoil; décor zone has interlocked T's, four bird-dragons with curled-in heads and with the long sweeps of the tails and the wings elegantly counterbalancing each other; diam. 21.3 cm. Art Institute, Chicago. Umehara, Seikwa 4: pl. 30 and Kanizen, pl. 20: 1.
- D 51. Pl. 37. The central field has a quatrefoil shape, outside that a round band, and from this again a quatrefoil; central field and décor zone have volute-and-triangle filling; in the zone four complete and four incomplete zigzag lozenges, connected through elongated lines from the former; inside these, four birds, with heads turned back. David-Weill collection. Umehara, Kanizen pl. 21: 2.
- D 52. Pl. 38. Round central band, with quatrefoil; central field and décor zone have granulation-bordered zigzag lozenges. *Lo-yang region*. Diam. $7\frac{1}{2}$ inches. Formerly in Lagrelius collection. Swallow pl. 39.
- D 53. Pl. 38. Quite similar to the preceding, but the background of the décor zone has a pattern reminiscent of the comma pattern. Formerly in Lagrelius collection.
- A mirror of the same kind. Moriya collection. Umehara, Kanizen pl. 21: 1.
- D 54. Pl. 38. Round central band; central field and décor zone have granulation-bordered zigzag lozenges; in the décor zone the same figure in broad bands (petals of a quatrefoil moved out and stylized) as D 27 above. *Lo-yang region*. Diam. 20 cm. Lagrelius collection.

In studying cat. C above, we found that it was essentially a Shou-chou region class; it seemed possible that the earliest and simplest types of comma-pattern mirrors, those with nothing but the commas in the décor zone, belonged to both centres, Shou-chou and Lo-yang, but the subsequent rich evolution of the comma mirrors took place in the Ch'u art, and we know it, as described in detail above, passing through a great many evolutionary phases, in the finds of the Shou-chou region. If, as we believe, the Lo-yang centre really did produce primary and simple comma mirrors in the 6th—5th c., it soon abandoned this line, and proceeded along a new quite different track: the mirrors of our cat. D here.

From the provenience data registered in our list it follows that the D category was essentially a product of the Lo-yang region art: that of the Chung-kuo «Central states»,

around the middle course of the Yellow River, particularly the Hân kingdom during the period of the Warring States, as described above.

Out of the mirrors of our cat. D there are 42 which we have good reason to believe come from the Lo-yang region or the other Honan centres (K'ai-feng, Cheng-chou, Huei-hien) (D 5 b—d, 7, 10 a, b, c, 11 b, 15 a, b, 16, 17 b, c, 18, 22 a, 23 a, b, 24, 25 a, b, 26, 27, 30, 31 b, 33 a—c, 37 a, b, 39 a, 40—44, 46 b, 47 a—c, 49, 52, 54). There are only three that are reported to come from the Shou-chou region (5 a, 17 a, 21), and 1 (D 22 b) from Ch'ang-sha, but all have good counterparts that come from the Honan region. It is therefore quite natural to conclude that these exceptions have been brought to the Shou-chou region in the course of trade or as booty; there can be no doubt whatever that category D generally is really a product of the Honan cultural centre, and we may justifiably call it «the Lo-yang region class».

The chronological position of this category may be determined by aid of various facts.

In the first place we have to consider the background patterns. As we have seen, there are four principal background patterns in this group:

- a. Interlocked T's;
- b. Granulation-bordered zigzag lozenges (filled with volutes-and-triangles);
- c. Ordinary lozenges (with only lines for sides) and filled with spirals (often S-shaped), and granulation;
- d. Volutes-and-triangles.

The first two (a., b.) of these types have already been an object of our investigation; on p. 35 above we have shown that they are decidedly pre-Han. We had several categories of early Han time mirrors (2nd c. B. C.) which had continued the tradition of filling in the background with a geometrical pattern, the most common on these Han mirrors being our 4th type here: the volutes-and-triangles. But in spite of this predilection for a filled background, we never find in those early Han categories the interlocked T's (a.) nor the zigzag lozenges bordered by a band filled with a line of granulation (b.). And we drew the legitimate conclusion that these background patterns a. and b. (just like the comma pattern of cat. C above) were obsolete in early Han time, that they had been eliminated from the grammar of the Han artist. Our first two types of background in this cat. D (a. interlocked T's and b. granulation-bordered zigzag lozenges) therefore clearly date their specimens as pre-Han mirrors.

We may now enlarge this conclusion to include also the third type of background, c.: lozenges filled with spirals and granulation. About this frequent and beautiful background pattern we may make two interesting observations.

On the one hand, it is used as being quite «synonymous» with the above-mentioned pre-Han patterns (a. and b.). We find it in D 19, 22, 23, 31, 38, 42, 44. Moreover, the mirrors D 19, 22, 23 are in their general features very much akin to D 17 (which has b. granulation-bordered zigzag lozenges); D 31 is closely akin to D 33 (which has a. interlocked T's); D 42 and D 44 are closely related to D 41 and D 45 (which have b. granulation-bordered zigzag lozenges). This shows us clearly how this type c. is parallel and interchangeable with the types a. and b. in our cat. D.

On the other hand, if we revert to categories F, H, J, K, the early Han categories that have a rich geometrical background, we find that just as types a. (interlocked T's) and b. (granulation-bordered zigzag lozenges) are lacking there, so also is there a complete absence of our 3rd type, c., the ordinary lozenge filled with spirals and granulation; the latter is therefore undoubtedly just as pre-Han as a. and b. We have thus found conclusive proofs that the great majority of our cat. D mirrors are really of pre-Han time. The small remainder comprises four mirrors types (21, 29, 43, 51) with a background of simple volutes-and-triangles, a background pattern that lives on vigorously in early Han time (cat. F). And these few mirrors place themselves in our cat. D as pre-Han mirrors, not because of their background pattern but because of their general affinity with the rest of the category: D 21 stands very close to D 19; 29 to 27 and 28; 43 is cognate to 42 and 44, and 51 is cognate to 29. Observe that it is only the simple «casing» for the volutes-and-triangles (ordinary lines) that is novel in these latter instances; in earlier groups the granulation-bordered zigzag lozenge was regularly filled with volutes-and-triangles, so this element as such had long been familiar in the category.

Our conclusion that the great category D is of pre-Han date obtains valuable support from the Kin-ts'un finds; no less than four of its specimens (D 15, 17 c, 26, 27) are reported to have come from the Kin-ts'un tombs. Certain objections, however, may be made to the conclusion that the D mirrors are all of pre-Han date, and it is advisable that we take them up for consideration before we proceed to an analysis of the group.

Karlbeck gives some reasons for his belief that the «Lo-yang group» (i. e. essentially our cat. D here) has «the middle of the 3rd c. as the earliest date» and runs down through the 2nd c. B. C., i. e. early Han time. His principal reason is our mirror D 1, which is decorated with two men who are fighting wild beasts and are armed with long swords. Karlbeck is of the opinion that such extremely long swords are hardly likely to have existed in the Warring States' time and that D 1 cannot therefore be earlier than «the latter part of the 3rd century». This is a clever idea, but I fear that the argument is not conclusive. We know too little of the chronology of Chinese swords to draw such wide conclusions from so frail a premise. In *Sung chai ki kin sü lu*, p. 129, there is a sword with an inlaid pre-Han inscription, and which has a length of 54 cm. — in fact, quite a long sword. And even more important: in *Tsun ku chai so kien ki kin t'u*, küan 2, p. 36 (also Umehara, *Senkoku* pl. 87) there is a Hu flask which shows a vivid scene with kneeling and shooting archers; these archers are girt with tremendously long sword-sheaths, to judge from the proportion of the bodies more than a metre in length, in any case much longer than the sword of the mirror D 1. Now, this Hu belongs to a great and important group known as the «hunting scene vessels», and that group is now quite definitely accepted as a pre-Han category: indeed one of its best specimens, the famous Hu of the Staatl. Museum in Berlin (Kümmel, *Chin. Bronzen* 1928, pl. 22, 23, Umehara, *Seikwa* pl. 207 and *Senkoku* pl. 86) carries a long pre-Han inscription. Our Hu discussed here, the archers on which are girt with very long swords, is, without the shadow of a doubt, pre-Han; and it is certainly not a product of the last, anarchic and decadent

years of the Warring States, for it is a beautiful specimen in high and good style, if anything earlier than the Berlin Hu. It may just as well date from the 4th as from the 3rd c. B. C. Indeed, no chronological conclusion can at present be drawn from the length of the swords; on the contrary, with our present very limited knowledge of Chinese sword chronology we ought to say that the Hu with the long swords is very valuable precisely because it furnishes us with proof that very long swords existed in pre-Han times! Once we know that the long swords of the mirror D 1 do not prevent the mirror from being pre-Han, there is certainly no possibility of determining the age of the mirror within half a century by aid of the sword drawings.

Karlbeck's theory that the «Lo-yang group» (D cat.) runs from the latter part of the 3rd c. down through the 2nd c. remains therefore unproved, and I have every reason to adhere to my positive arguments above for the pre-Han date of the entire category.

There is, however, yet another objection that might be made against my dating, which deserves to be discussed.

The salient feature of the Lo-yang region mirror art, as evinced by our cat. D, is the animal décor. The great majority of its specimens are dominated by beautifully placed and exquisitely drawn animal figures, quadrupeds, dragons, bird-dragons, birds; only the last ten specimens in our group lack this decorative feature. We should expect to find these same animal figures in other branches of the late Chou bronze art, on ritual vessels etc., and thus to find evidence for their pre-Han date. Strangely enough this expectation is not fulfilled. The fauna of our mirrors is not very similar to that of other bronzes, and in particular most of the dragons are quite differently shaped. Isolated points of contact may be found. The dragon on our mirror D 29, for instance, is closely akin to the dragon on the lid of the famous inlaid Ting from the Kin-ts'un find (BMFEA 9, pl. 59: 1, Umehara, *Rakuyō* pl. 10). But such isolated exceptions only confirm the rule: the animals on our D mirrors are on the whole not very similar to those (mostly dragons) on ritual vessels in the Huai style.¹ Does not this incongruence between the D-mirror dragons and the dragons of ritual Huai style vessels suggest that they are of a different epoch? Can it be that after all our D mirrors are of Han time, not of pre-Han time?

To this objection we may first answer: if, on account of the incongruence with pre-Han dragons on ritual bronzes, we were to date the D mirrors in Han time, we should necessarily, if we are to be consistent and logical, demand that they agree stylistically with animal representations of proved Han date. That, however, is not the case. We know of a great many animal representations from Han time. In the first place we have the scores of inscribed mirrors of Han date which have an exuberant animal décor; as examples we may cite Umehara, *Seikwa* 4: pls. 60—76; then there are the inlaid Han bronzes studied by Rostovtzeff², with many exquisite animal figures; there are, further, the animals in the grave reliefs (Wu-liang-ts'i, Hiao-tang-shan etc.), on tomb tiles of the Han era (see *Han tai k'uang chuan tsi lu* by Wang Chen-to), on lacquered

¹ For examples see pls. 2 and 5 below.

² M. Rostovtzeff, *Inlaid Bronzes of the Han Dynasty*, pls. 1—3, 5—13.

objects and other specimens excavated by the Japanese in Korea, on some of the Noin-ula textiles, etc. The animal representations in the Han art are thus very well known; and they have really nothing in common with our animal figures in the mirrors of cat. D. So that a comparison of these D-mirror animals with animals on other groups of objects affords just as little evidence of a Han as of a pre-Han date.

Indeed, the mere fact that we do not find exact replicas of our D-mirror animals on other bronzes of late Chou time constitutes no obstacle to our dating them in the 4th or 3rd c. B. C.; that follows from a striking parallel. The large and important class of vessels discussed just now, the «hunting-scene vessels», have a fauna and a mode of animal representation as different as possible from that of the bells and Ting tripods with «hieratic dragons» (interlaced, or combined into compact decorative figures). And yet, the hunting-scene Hu flasks are undoubtedly pre-Han, this being proved, as just stated, by among other things the inscribed Berlin Hu, and thus contemporaneous with the bells and Ting tripods with «hieratic» dragons. A very interesting example of the fact that these two fundamentally different modes of animal representation were contemporaneous is furnished by a big fragment of a P'an in the Li-yü find (pre-Han); here (Umehara, Senkoku pl. 14) on the outside of the vessel we find a band with hieratic interlaced dragons, and on the inside, close to the rim, a row of realistic animals in the free and mobile style of the «hunting-scene vessels» (tiger, dog, deer, turtle, frog etc.). Here the two different animal styles actually coexist on one vessel.

If, then, the Berlin Hu flask, with its pre-Han inscription, is from the Warring states period as surely as are the bells and Ting tripods with hieratic dragons (interlaced or in compact groups) in spite of the fact that its animal representations are fundamentally different from those of the latter, and if, moreover, the two types of animals can coexist on a pre-Han vessel (Li-yü), we are equally justified in saying that the animal representations of our D mirrors may be pre-Han in spite of their being stylistically different from the hieratic dragons of the sacrificial vessels; all the more so since there is, after all, a certain affinity between our D-mirror animals and the animals in the free style of the hunting-scene vessels. Not that they are identical—far from it—, but they have stylistic points in common: the flat sheet relief, the elegant drawing, the absolutely free and living movements of the animals are the same in both groups. This fact may be said to corroborate our pre-Han dating of the D mirrors arrived at on the basis of arguments of quite another kind.

If we have thus succeeded in determining the latest date of the group (ca. 200 B. C.), its earliest age limit and the chronology within the category are much more difficult to establish.

In our above record of the 54 types of D-category mirrors we have arranged them in certain principal groups. The basis of this classification has not been the difference between mirrors with circular décor zone and rim on the one hand, and mirrors with starshaped margin on the other. However tempting it might be to suppose that mirrors with a small starshaped central band like D 12 and D 16 were older than a mirror like D 36, where the star figure has been moved half-way out in the décor zone, and that

this again was older than mirrors like D 6, 9, 14 etc., where it has been transposed even further, forming the outer margin of the décor zone, such a theory is not tenable. For we find several examples of one mirror with ordinary rim and one with starshaped margin being exactly alike in all other respects, and yet the former being of a decidedly early type. Thus we have D 6 (starshaped margin) with the same background and exactly the same vivid and primary dragon figure as D 5 (circular décor zone and rim), and therefore just as early, typologically, as the latter. In the sub-categories, therefore, I have placed mirrors with circular zone (with rim) and mirrors with starshaped margin side by side, quite irrespective of this difference, provided they are closely akin in other respects. In other words, the starshaped margin cannot serve as a criterion of late date within category D. Its origin may very well be that suggested just now: the starshaped central band moved out to a peripheral position; but if so, this variation has been invented early and carried through quite rapidly, and does not give us a chronological *point d'appui*.

Quite different is the result if we seize upon another décor feature of the greatest interest: the phenomenon, already discussed on p. 54 above, of the zigzag lozenge of the background having been detached and converted into an independent principal décor element, raised over the background, and placed, in a sequence of four lozenges, round the décor zone, sometimes straight across the background lozenges, and sometimes even over a background pattern of a different kind (e. g. interlocked T's); the zigzag lozenge figure may be complete, as in D 30, or incomplete, resting against the rim, as in D 34. If we examine the whole group of mirrors with this feature, we shall find that none of them have real dragons, with primary dragon heads, as in D 3, 5, 7, 11, 17 etc., but exclusively bird-dragons or birds. Corresponding, then, to the difference between mirrors like D 3 etc., with a «clean» décor zone, having only animal figures and nothing else, and mirrors with zigzag lozenges in between the animals in the décor zone, there is the fundamental difference between real dragon heads on the one hand, and bird-dragons or birds on the other. This cannot be accidental but must reveal two successive stages of evolution, and there can be no doubt as to which stage is the later: the detached and raised zigzag lozenge as part of the principal décor represents a later, a more advanced stage than that in which the zigzag lozenge only occurs in its primary function as a background pattern. And we learn at the same time that the bird-dragon, in one form or another, belongs above all to this later stage.

This does not mean that the real dragon, with its orthodox dragon head, was entirely eliminated from the moment the bird-dragon appeared; we shall see that this was not the case: the two variants overlap to some extent. But we have obtained a preliminary classifying principle which tells us roughly that some principal types (the original dragon types) make their appearance earlier than certain others (the bird-dragon types).

And this fact is corroborated if we examine the background patterns. If we leave out of consideration for the moment the mirror types D 19—29, which have some special features of their own, and confine ourselves to types D 1—18, we shall find that they have exclusively interlocked T's (D 1, 5, 6, 11—14, 16) and zigzag lozenges

(D 2—4, 7, 8, 10, 15, 17, 18). But in group D 30—40 (those with raised zigzag lozenges as an element in the principal décor), we find, besides interlocked T's (D 33, 34, 40) and zigzag lozenges (30, 35—37, 39), the third background pattern also: ordinary lozenges with spirals and granulation filling (D 31, 38). In other words, this third kind of background pattern crops up only in the later section within this great category, not in the primary types 1—18 of the earlier section.

On the basis of these general principles of classification, I have arranged the D mirrors in four sections, which we shall now pass in review.

In the first section (mirror types D 1—18) I have placed, on the one hand, specimens with dragons or other animals that are fairly «realistic», i. e. not too violently stylized or deformed (mirrors D 1—12): there is a quite clear, well-drawn and living head, a realistic hind part of the body and legs; here we must also place a comparatively primary bird (D 10). On the other hand, I incorporate in the same first section a series of mirrors (D 13—18) with dragon figures that may still have quite clear dragon heads and hind parts, but which are, on the whole, more stylized in one respect or another: the bodies are weirdly formed, as in D 16, or tail and wings are drawn out into long symmetrical loops, counterbalancing each other; sometimes the dragons are so stylized that you have to examine them closely before realizing their construction.

It is evident that the types D 13—18 are somewhat later, typologically speaking, than D 1—12; but to convert this style impression into an exact difference in years (the one sub-group being 25 or 50 years later than the other) would be too risky; we sum them all up into one large section, letting it be understood that it extends over a period long enough to allow of such stylistic evolution.

It is much more important to try and fix this period of the entire first section chronologically. And here we have to revert to the background patterns. In many of the mirrors of this first section (D 1—18) we find the best and most primary forms of the interlocked T's background (mirror types D 1, 5, 6, 11—14, 16). Now, we have witnessed earlier that in category C (comma-pattern class) the slanting T's, which cannot in any circumstances have grown out of the bottom décor in that group, must be due to a loan, an influence from our category D here: these striking decorative figures have been borrowed by the Shou-chou artists, «pulled out», as it were, from their position as continuous background pattern, raised into broad bands in flat and slightly concave relief, and placed in a circle over the décor zone. These primary slanting T groups in category C (Shou-chou class) we have dated — quite independently of the chronology in the Lo-yang cat. D here — in the 4th century B. C., because they occupy a relatively early place in the typological evolutionary chain in category C. We must necessarily conclude that the loan-giver, the Lo-yang category D, must already have possessed mirrors with the interlocked T's background early in the 4th century B. C. It is evident then, that our first section here (types D 1—18), which is typologically the most primary among the D mirrors with interlocked T's, must be placed in the 4th century, probably extending over the major part of that century, since it exhibits such considerable stylistic variations as those just described above (D 1—12: D 13—18). On the

other hand, there is a reason why we do not believe that they go back even further, i. e. to the 5th century. In our study of the B mirrors (t'ao t'ie group) and C mirrors (comma-pattern group) we had reason to assume that the mirrors of the early rim type: the flat rim, occupied the 5th century in Lo-yang as well as in Shou-chou. Now, in our cat. D here, we have not a single example of the flat rim, and hence we dare not place any D mirrors as far back in time as the 5th century.

In regard to the background, we may observe that in this early section (D 1—18) there are not only interlocked T's but also granulation-bordered zigzag lozenges, and even some cases (D 7, D 8) of zigzag lozenges on the way to becoming simple lozenges, and without granulated borders. On the other hand, it should be repeated that in this early section the zigzag lozenge has not yet been converted into an independent décor element raised over the background. And the third type of background pattern: regular, ordinary lozenges filled with spirals and granulation has not yet made its appearance.

To sum up: the first section has to be placed in the 4th c. B. C.

In the second section I have described a number of types (D 19—D 29) which in many respects are quite closely akin to the preceding, but which are undoubtedly younger.

The first four types D 19—22 (the reproductions in Swallow and Umehara are unfortunately so poor that the background pattern of 20 and 21 b is not discernible) are quite closely related to D 17 above, yet there is a marked difference: instead of the décor zone with nothing but the dragons in D 17, we have here a large quatrefoil. This in itself does not necessarily indicate a late date, for we saw in the Shou-chou category C that the quatrefoil mirrors flourished there in the 4th century. But the petals here are very baroque: fat and with swelling curves, very unlike the stiffer petals of category C. Moreover, the whole type of these mirrors D 19—22 very closely resembles that of D 23, in which we find the bird-dragon — as stated above, a feature marking a later stage. Both these reasons combine to move D 19—22 down into the 3rd century. This is confirmed by another fact: we must believe that some types with this complete dragon head (and not exclusively bird-dragons) survived well into the 3rd century, because otherwise we could not understand our Shou-chou cat. E below. In that category, which started ca. 250 B. C. (see p. 101 below) we frequently find a dragon's head that is closely akin to and certainly derived from our D-category dragon's heads: we shall find it described in detail below how this category E, which marked an abrupt break in the Shou-chou tradition, was based on strong influences from the Lo-yang class (cat. D here); in particular the dragon's head, to which nothing similar is to be found in the earlier Shou-chou mirrors (C cat.), must be due to Lo-yang connections; Lo-yang must therefore have possessed specimens with fully typical dragon's heads as late as the middle of the 3rd c., and I consider D 19—22 to be such specimens. This fact is corroborated by the important phenomenon that D 19 (like D 23 below) has for background the «lozenge with spirals and granulation» pattern, which never occurs in our 4th century types D 1—18, but several times in the later types, which will be studied presently. Finally it should be observed that this group (D 19—22) shows signs

of having spread southwards from the Honan centre. D 21 comes from Shou-chou, and D 22 b from Ch'ang-sha. On the other hand, D 22 a comes from Lo-yang and the whole group is closely akin to D 18 and D 23, both from Lo-yang. So there is no doubt that this sub-category fundamentally belongs to our Lo-yang category D.

Further, to this same second section belong the mirror types D 23—26, all of which possess this in common, that they have the «bird-dragon» which we had reason to believe was later than the early forms of the real dragon above (first section) and dates in the 3rd century. D 23 has the same swelling and baroque quatrefoil as D 19—21 discussed just now. And D 24 has another very telling detail: the ledge of the rim marked with slanting strokes, a feature that never occurs in the first section (D 1—18), but which we shall find again in the Shou-chou cat. E below (ca. 250—ca. 200 B. C.). Therefore a mirror like D 24, with the ledge of the rim marked with slanting strokes, may reasonably be expected to belong to the 3rd century, where in fact it is already placed by that principal décor element: the bird-dragon.

The «bird-dragon» is a curious creature, differing from an ordinary bird in having an embellishment on the head which — upon comparison with the earlier dragons — may be assumed to be an ear (not a crest), and thus suggesting a supernatural bird, and often in having a dragon-like elongated body.

Finally, this same second section comprised also three types of large size (27—29) with a very advanced décor. Besides dragons, quadrupeds and birds, there are bird-dragons on two of them. Moreover, there run through the décor zone large figures in broad bands in flat (or rather slightly concave) relief which are sophisticated variations of big quatrefoil petals — an obviously late feature.

The background of this second section shows, besides interlocked T's (D 24—26) and granulation-bordered zigzag lozenges (D 27, 28) three cases of lozenges with spirals and granulation (D 19, 22, 23) and even two cases of ordinary volutes-and-triangles (D 21, 29) — evidence of their late date.

To sum up: the 2nd section has to be placed in the 3rd c. B. C.

In the third section I have placed all the mirrors with the zigzag lozenge (complete or incomplete) raised to an independent element of the principal décor (D 30—40). These all have a bird-dragon or a bird as the animal feature of the design. In D 30 there is no ear visible on the bird-dragon, but an ear is very clearly seen in D 32, 33, the animals on which are otherwise identical with the former, while the curiously twisted and elongated bodies suggest supernatural animals.

There are several types of these bird-dragons. One is the animal with the highly decorative crossing of the straight neck and the elegantly curving and raised tail (D 30—33); another shows the head curled in and the tail raised in a curve above the head (D 34); a third has the head bent back and the tail stretched out in a curve to the left (D 35). In some instances, such as in D 30, the earlier form of the tail, as we have seen it in D 5 above: a curved end with a small wing-like addition on the side, tends to become merely a cleft end, with curled-in parts; this cleaving and curling-in is carried very far in D 38, where we observe also that one part is slightly shorter than the other

(a reminiscence of the original form). This feature reminds us strongly of the dragon shapes in many Huai-style jades; see for instance the jade from the Kin-ts'un tombs (White, Tombs pl. 126: 313 b); though this is a real dragon and the animal on D 38 is a bird-dragon, the two animal pictures are very much akin to one another.

The background in this third section has, besides interlocked T's (D 33, 34, 40) and granulation-bordered zigzag lozenges (D 30, 35—37, 39) several cases of ordinary lozenges with spirals and granulation filling (D 31, 38), which, as we have seen, did not occur in the first section (4th century). Furthermore, in some of the specimens (D 37, 39, 40) in our third section there crop up certain other décor elements which are entirely unknown in the Lo-yang region mirrors of the 4th century (1st section), and which are probably due to an influence from the Shou-chou region mirrors (cat. C above). On the central band (here starshaped) are placed petals, either single, but long and pointed as in D 39, 40, or drawn-out into «stalks» with additional flowers at the end, as in D 37 — something similar to what we have been studying in cat. C above. In category C we saw that the reciprocal influences between Lo-yang and Shou-chou were strong in the 3rd century — it was at that stage that the Shou-chou group borrowed the zigzag lozenge, for instance, as principal décor element, C 80 above — and this tallies well with the dating of our 3rd section as a late stage.

To sum up: this section has to be placed in the 3rd c. B. C.

In a fourth section (D 41—49) I have placed some mirror types that have no animal representations, as have the majority of the D category mirrors, but which none the less form an important part of the Lo-yang group. Their classification is easy by aid of cross references to the 3rd section just studied. In 41, 42, 45 and 47 we have exactly the same elongated and pointed petals as in D 39 and 40, and, moreover, D 41, 42, 45 have just the same granulated border on the petals as we found in D 40 above. Again, D 41 has the same curious, «harp»-shaped calyx as D 37 above.

This latter «harp»-shaped calyx — an extremely unusual and characteristic feature — recurs in D 42, 43, 44, and places these two types in the same class: moreover, D 44 has the same starshaped central band, which is such a common feature in our D category generally.

This D 44 has the peripherically placed quatrefoils which are certainly a loan from the Shou-chou category C; there we witnessed their organic and gradual development from simpler schemes; here they crop up suddenly without any preliminary stages. In category C we gave reasons for believing that they belonged to a late stage, the 3rd century, which supports our placing of this fourth section here as contemporaneous with our third Lo-yang section, i. e. the 3rd century. This fact furthermore corroborates our placing of D 45 (see above), which also has these peripheral quatrefoils, in this fourth section and justifies our inserting D 46 in the same group. Finally, D 43 (with its «harp»-like calyx) offers a striking example of another loan from the Shou-chou group: the quatrefoil petals, elongated into «stalks» with slanting strokes and with another set of outer petals. This loan element recurs in D 47 and 48.

The background of this fourth section contains, besides granulation-bordered zigzag

lozenges (D 41, 45—49), also simple lozenges with spirals and granulation filling (D 42, 44) and volutes-and-triangles (D 43), the latter two being patterns that do not appear in the first section (4th century)¹.

To sum up: this fourth category (D 41—49) has to be placed in the 3rd century B. C.

After these regular four sections of cat. D, I have recorded, at the end, five mirror types (D 50—54) which are more difficult to place.

The first of them, D 50, the beautiful mirror in the Art Institute of Chicago, is indeed a veritable riddle. It has various features which are hard to reconcile. It has the interlocked T's pattern, which, as we have seen, is decidedly pre-Han and occurs exclusively in our Lo-yang category D, but not in the Shou-chou categories; it has some highly stylized dragons, which are also akin to those of our category D, but not to those of the Shou-chou categories. On the other hand, it has the sharp-edged rim which is the rule in the Shou-chou categories (C, E, F) but very rare in our Lo-yang category D. And it has in the contours of the dragons a beginning of the element to be studied in cat. F below and there called «the Han curl border». Is the mirror an archaizing Han time specimen?

D 51, 52 and 53 are best seen in the light of D 19—23 above, with which they have fundamental features in common (the bulbous quatrefoil petals). But D 51 has a very unusual application of the zigzag lozenge element, and D 53 has a unique kind of background pattern, akin to the comma pattern. The affinity with D 19—23 justifies their being placed in the 3rd c. B. C. Finally, D 54 may reasonably be put in relation to D 27—29, having the same broad bands in «debased petal» shape as these mirrors, and therefore probably also dating in the 3rd c. B. C.

CATEGORY E.

I should like first of all to make some remarks of a general nature, which concern many mirrors of the class, so as not to have to repeat them when describing the individual mirrors.

The central band is always round, never square, as it often was in the preceding categories, nor starshaped (with one curious exception). It is generally much larger (lies farther out) than in categories A—D. Furthermore it is set off against the principal décor zone, in a very few cases by a ledge, as in categories C and D, but in the great majority of the mirrors by a quite new arrangement: a raised line is added just outside the band, and the narrow space between is mostly filled in with slanting strokes (rope pattern). Sometimes a similar setting-off by means of slanting strokes and an extra line is made close to the inner, central field as well. Except in the case of few transi-

¹ The fact that the pattern interlocked T's, which was very important in our first (4th c.) section, does not appear here might suggest that our fourth-section mirrors are to be placed quite late in the 3rd century; but the examples are too few to enable us to draw any definite conclusion of this kind.

tional types (E 1-3), there is never a starshaped outer margin, as in cat. D, but regularly a rim of the concave type, with the outer part high and very often quite sharp — the typical Shou-chou rim (as in cat. C), as against the Lo-yang rim described in cat. D. The rim is similarly set off against the décor zone, very rarely by a mere ledge, in most cases by an extra raised line, the narrow space being mostly filled in with slanting strokes. The principal décor in the whole of this group consists of rows of dragons, in a variety of positions and with all kinds of arabesque-like embellishments; they are placed either antithetically, in pairs, or consecutively round the décor zone. At a casual glance it is often difficult to discern their construction and details, and in order to facilitate the analysis for the reader, and also to avoid tedious repetitions in the individual mirror descriptions below, I have combined in text figures (figs. 14—16) skeleton drawings¹ of most of the dragons exemplified. Observe that these drawings are not exact reproductions of the whole dragon figure with all its finer details, but simplifications, «skeletons», in which often a simple line stands for a whole section of the body, which in reality has various small curvings and additions. Thus our drawings in figs. 14—16 are not calques but interpretations. This is the only way of making the construction easy to grasp at a glance, and no misunderstanding of this simplification should arise since the mirrors, with the dragon pictures themselves, are all reproduced in our plates.

In a section of this category we again find the element zigzag lozenge, the birth of which out of a modified interlocked T's pattern we described in detail on p. 30 above. The complete (closed) and independent zigzag lozenge played a prominent part in the preceding Lo-yang category D, first as background pattern and then, raised in flat relief, as an element of the principal décor. Here, in cat. E, we find it again, but now applied in a different manner. It is attached to some part of the dragons: either the tail runs out in this zigzag figure, or a stroke which marks the position of a wing, or a line from the neck or the head — the variations are many. The outcome of this mode of application is that it is not the complete, closed, zigzag lozenge, but the variant that is open in the side which dominates in this category. The recurrence of this figure in three or four places in the décor zone (the parallelism with the zigzag lozenge mirrors of cat. D is here quite striking) has the effect of dividing the zone into three or four sections, somewhat reminiscent of the divisions in mirrors with long petals.

E 1. Pl. 39. This mirror is a transition form between category D and the present class. It has four petals of the broad bulbous type (see D 19 ff), and the starshaped margin. But both the central band and the margin are set off by extra lines and slanting strokes, E-category fashion. The two antithetical dragon-birds (heads inwards) are also of a type unknown to category D (observe the petal-shaped embellishments behind the neck and on the curve to the left, cf. E 17 below). The background has volutes-and-triangles. *Shou-chou region*. Lagrelius collection.

¹ The figures have been drawn by Mrs. Birgit Vessberg.

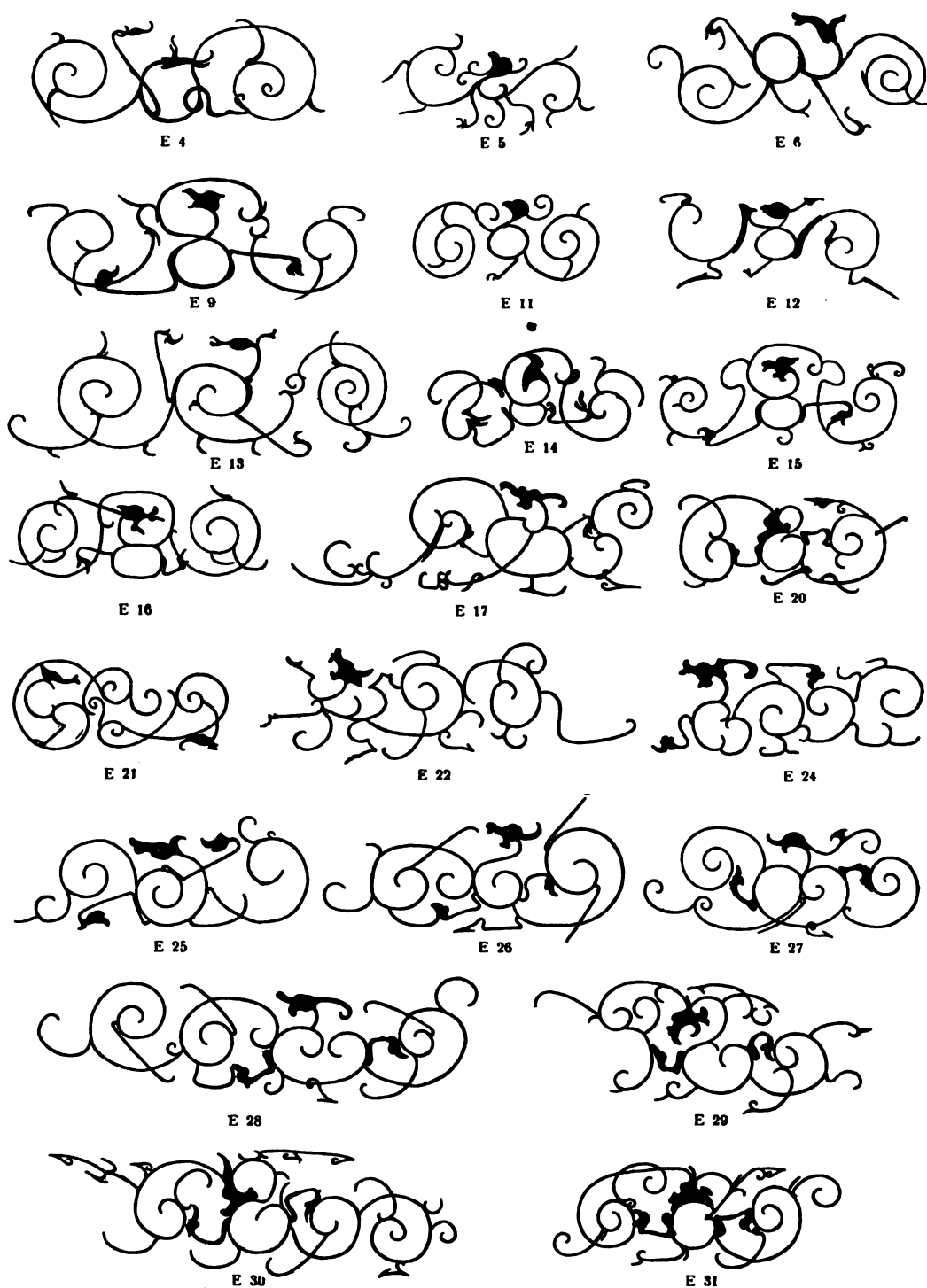


Fig. 14.

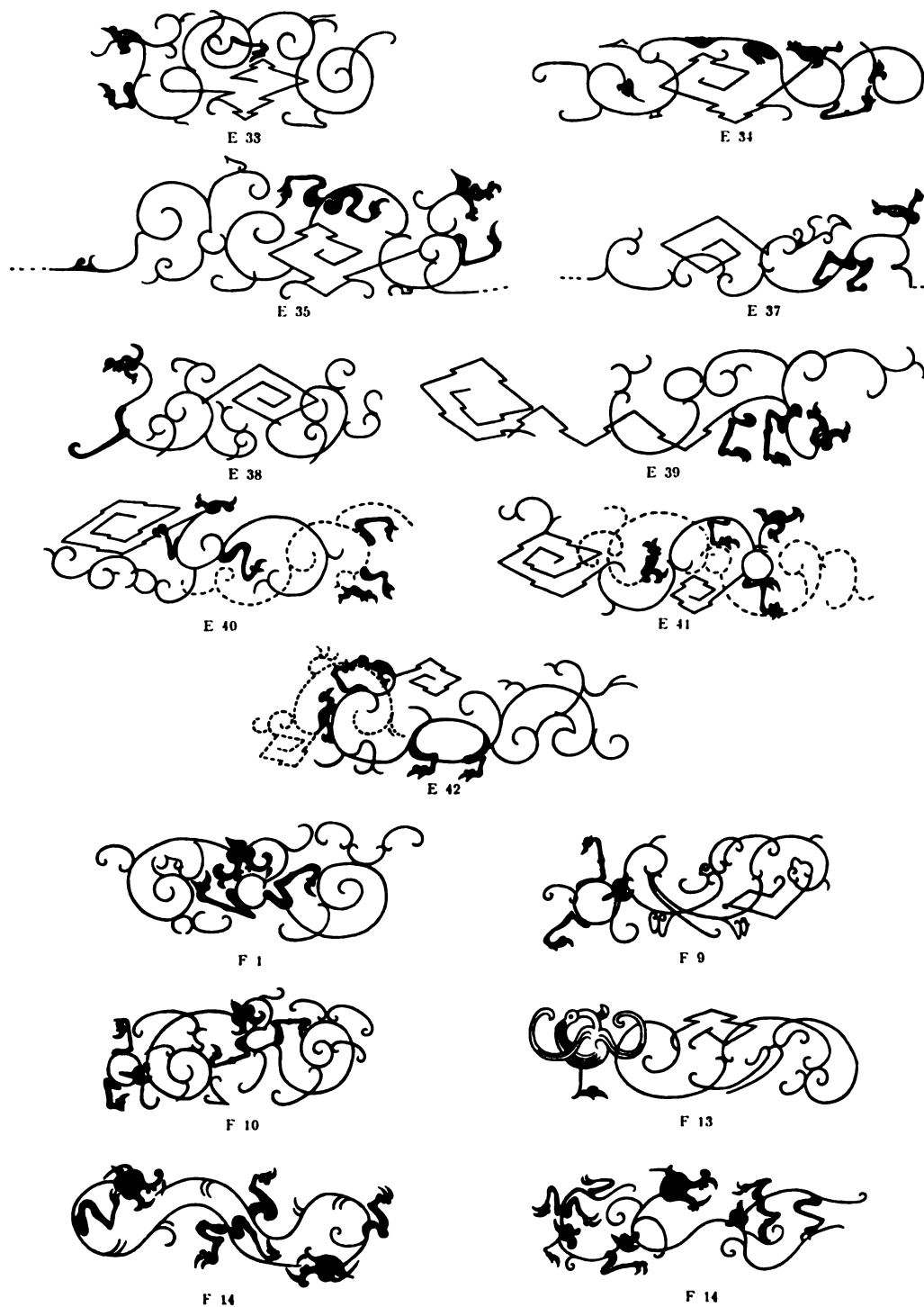


Fig. 15.

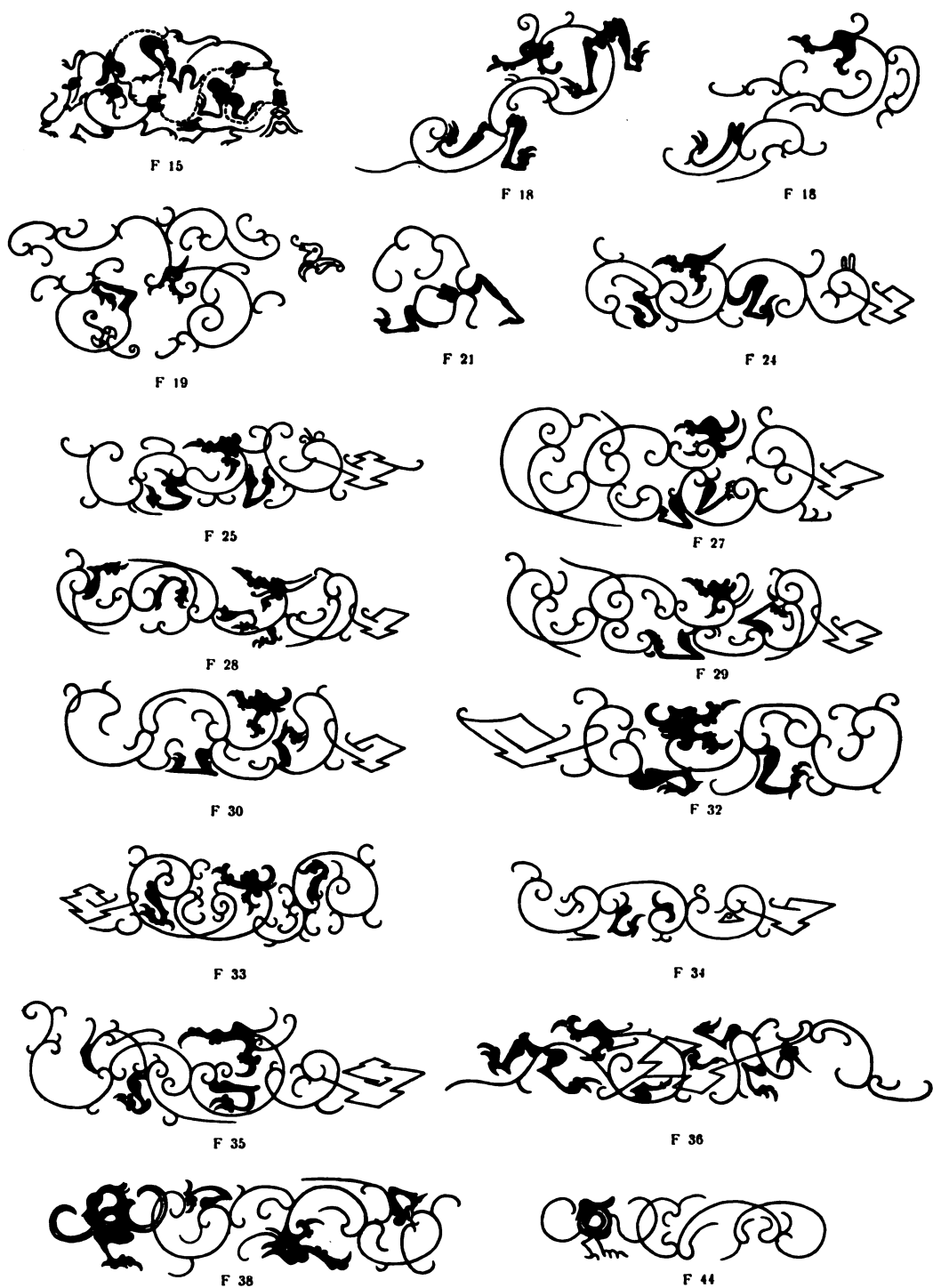


Fig. 16.

E 2. Pl. 39. Another transitional type between cat. D and E. From cat. D are borrowed the starshaped margin, but for the rest there are only Shou-chou features: the margin line is set off by a ledge of slanting strokes, the central band by an extra line and a slanting-stroke filling. Instead of petals there are four filled circles — a quite unique feature. The four antithetical dragons (heads outwards) with one leg raised high have, fore and aft, the spiral-shaped rolling-up and cleaving which we shall find to be typical in many subsequent mirrors. The background has volutes-and-triangles. *Shou-chou region*. Diam. 17 cm. Crown Prince collection.

E 3. Pl. 39. A third specimen with the Lo-yang star-shaped margin, otherwise savouring more of our cat. E here, though it is unique in many respects. The margin is set off by an extra line. The background has parallel stripes following the contours of the four dragons; these latter have the spiral rolling-up fore and aft that is typical of our class here; four leaf-like petals; diam. 12.2 cm. Crown Prince collection.

E 4. Pl. 39. The quatrefoil petal, which we have studied extensively in the preceding groups, appears here in a new shape: it is placed on a stalk so that it extends throughout the décor zone; the shape of the petal somewhat resembles the shape of a rosebud, and in order to find a short term for it we may call it the «bud»-shaped petal; the background has volutes-and-triangles; the four antithetical dragons (heads inwards), with one leg raised (fig. 14) are very closely cognate to those on E 2 above. Moriya collection. Umehara, Kanizen pl. 27: 4.

A mirror of the same kind. Swallow pl. 43; «diam. $8\frac{1}{16}$ inches». *Lo-yang region*. Swallow collection.

E 5. Pl. 40. «Bud»-shaped petals; the background has lozenges with spiral and granulation filling; four consecutive bird-dragons (heads inwards), with plumes stretching forwards from the neck (fig. 14). *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind, but with slanting strokes and an extra line inside the rim and slanting strokes between, of less good quality; diam. 10.4 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Yen-k'u fig. 58.

A mirror like the preceding, poor quality. *Lo-yang region*. Diam. 10.1 cm. MFEA (K. 11.276: 107).

A mirror of the same kind, but with three extra lines inside the rim, with slanting strokes between; poor quality. *Lo-yang region*. Formerly in Lagrelius collection.

E 6. Pl. 40. «Bud»-shaped petals connected with the dragons; the background has volutes-and-triangles; four antithetical dragons (heads outwards) with one foot raised high (fig. 14). *Shou-chou region*. Diam. 19 cm. Lagrelius collection.

E 7. Pl. 40. Leaf-shaped petals, connected with the dragons; background volutes-and-triangles; four antithetical dragons (heads outwards), with one foot raised high, closely akin to those of E 6. *Shou-chou region*. Diam. 19.2 cm. Crown Prince collection.

E 8. Pl. 40. Petals with hook-like embellishments and connected with the dragons; background lozenges with spirals and granulation filling; four antithetical dragons (heads outwards) with one foot raised high, very similar to the preceding, though slightly simpler. *Shou-chou region*. Diam. 19 cm. Lagrelius collection.

- E 9. Pl. 41.** Petals detached and inverted (points inwards); background volutes-and-triangles; three consecutive dragons (heads outwards, fig. 14). *Shou-chou region*. Yen'k'u fig. 62.
- E 10. Pl. 41.** Heart-shaped petals, which are detached (without stalks connecting them with the central band), with a circle in the middle, and connected by extra strokes with the dragons; background volutes-and-triangles; four consecutive dragons (heads inwards) with two legs raised high; the head is bent back violently, so that the gaping jaws (teeth showing) faces the central band; diam. 16.6 cm. Oeder collection.
- E 11. Pl. 41.** Leaf-shaped detached petals, connected with the dragons; background volutes-and-triangles; four antithetical bird-dragons (heads outwards, fig. 14). *Shou-chou region*. Diam. 11.2 cm. Lagrelius collection.
- E 12. Pl. 41.** Features the same as in the preceding, but the dragons are different (fig. 14), though much akin to those of that mirror. Bluett & Co., London.
- E 13. Pl. 41.** Petals and background as E 11; four antithetical dragons (heads inwards) with one foot raised high (fig. 14), closely akin to those of E 6—8 above. Yamanaka, Osaka. Umehara, Kanizen pl. 28: 1.
- E 14. Pl. 42.** Petals and background as E 11; four consecutive bird-dragons (heads outwards; fig. 14). *Shou-chou region*. Diam. 11.6 cm. MFEA (K. 12.430).
- E 15. Pl. 42.** Leaf-shaped, detached petals (very small), connected with the dragons; background volutes-and-triangles; four antithetical dragons (heads outwards; fig. 14). *Shou-chou region*. Diam. 16.5 cm. Hellström collection.
- A mirror of the same kind; diam. 13 cm. Lambert collection. Swallow pl. 502.
- E 16. Pl. 42.** Petals and background as in the preceding; four consecutive dragons (heads inwards; fig. 14); *Shou-chou region*. Karlbeck collection.
- E 17. Pl. 42.** Stylized leaf-shaped detached petals, connected with the dragons; background lozenges with spiral and granulation filling; three consecutive dragons (heads inwards; fig. 14); observe the embellishments of heart-shaped petal figures in several places on the dragons, cf. E 1 above; the dragons are connected at the base; decorated knob. *Shou-chou region*. British Museum.
- A mirror of the same kind; diam. 19 cm. Lambert collection. Swallow pl. 599.
- E 18. Pl. 43.** Same kind as the preceding, except for the central field, which is here convex and adorned with a dragon in open-work. *Shou-chou region*. Diam. 24 cm. Lagrelius collection.
- A mirror of the same kind; diam. 16.5 cm. Lambert collection. Swallow pl. 604.
- E 19. Pl. 43.** Very similar to E 17 above, but the background consists of volutes-and-triangles, and there are some slight variations in the dragons, which are not connected at the base. *Shou-chou region*. Karlbeck collection.
- E 20. Pl. 43.** Petals detached and stylized into a kind of ornate cross, not connecting up with the dragons; background lozenges with spiral and granulation filling; four antithetical dragons (heads outwards), the jaws wide-open and biting over a bend in the body (fig. 14); dragons connected by an open V-like figure with a small petal in the middle. *Shou-chou region*. Karlbeck collection.

- E 21. *Pl. 43.* Small groups of two dragons, one with head inwards and one with head outwards (fig. 14); the outer dragon has a crest on the head of the same shape as the central band petal; background not discernible in the poor photo; diam. 19 inches. Lambert collection. Swallow pl. 532.
- E 22. *Pl. 44.* Three very small petals close to the central band are worked into the dragon figures very unobtrusively; background volutes-and-triangles; three consecutive dragons (heads inwards; fig. 14) have embellishments in the form of heart-shaped petals in various places, cf. E 17 above. *Shou-chou region*. Crown Prince collection. A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.
- E 23. *Pl. 44.* No petals either in this or the following; background lozenges with spirals and granulation; four consecutive dragons (heads inwards) with embellishments of heart-shaped petals. *Shou-chou region*. Diam. 14.8 cm. Lagrelius collection.
- E 24. *Pl. 44.* Background volutes-and-triangles; four consecutive dragons (heads inwards; fig. 14) *Shou-chou region*. Karlbeck collection. A mirror of the same kind. *Shou-chou region*. Yenku fig. 68.
- E 25. *Pl. 44.* Background lozenges with spirals and granulation; three consecutive dragons (heads inwards; fig. 14). *Shou-chou region*. Diam. 9.5 cm. Lagrelius collection.
- E 26. *Pl. 45.* Background lozenges with spirals and granulation; four consecutive dragons (heads inwards; fig. 14), hooked on to one another. *Shou-chou region*. Karlbeck collection.
- E 27. *Pl. 45.* Background volutes-and-triangles; four consecutive dragons (heads inwards; fig. 14), with heart-shaped petal embellishments; diam. 18.5 cm. Lagrelius collection.
- E 28. *Pl. 45.* Background lozenges with spiral and granulation filling; three consecutive dragons (heads inwards; fig. 14), hooked on to one another. *Shou-chou region*. Diam. 16.5 cm. Lagrelius collection.
- E 29. *Pl. 46.* Background lozenges with spiral and granulation filling (much corrupted); four consecutive dragons (heads outwards; fig. 14), hooked on to one another. *Shou-chou region*. Diam. 14.3 cm. Hellström collection.
- E 30. *Pl. 46.* Background volutes-and-triangles; three consecutive dragons (heads outwards; fig. 14), jaws wide open and biting over a bend in the body, cf. E 20 above; the dragons connected with one another. *Shou-chou region*. Diam. 14.3 cm. Lagrelius collection.
- E 31. *Pl. 46.* Background lozenges with spiral and granulation filling; four consecutive dragons (heads outwards; fig. 14), with jaws biting over a bend in the body, as in the preceding, and hooked on to one another. *Shou-chou region*. Diam. 20 cm. Hellström collection.
- E 32. *Pl. 47.* Background lozenges with spiral and granulation filling; the décor zone has a jumble of dragons, some with heads outwards and some inwards; there are also three consecutive dragons in the central field. David-Weill collection. Rev. A. A. 1934, pl. 54. Umehara, Kanizen pl. 26: 1.

- E 33. Pl. 47.** Background volutes-and-triangles; four consecutive dragons (heads outwards; fig. 15), into which are worked open zigzag lozenges, each dragon resting his front paw against a volute of the preceding one; in a great many places are heart-shaped petal embellishments; in the central field three more consecutive dragons with heads turned backwards. *Shou-chou region*. Diam. 22.7 cm. MFEA (K. 12.414).

A mirror of the same kind. *K'ai-feng region*, Honan. Diam. 23.4 cm. Staatl. Mus. Berlin. Kümmel, Gedächtnis pl. 43.

A mirror of the same kind; diam. 22.5 cm. Calmann collection. Kümmel, Kunst pl. 28, Umehara, Seikwa 4: pl. 35 and Kanizen pl. 27: 2.

- E 34. P.. 47.** Background volutes-and-triangles; three consecutive dragons (heads outwards; fig. 15), with open zigzag lozenges. *Shou-chou region*. Karlbeck collection.

- E 35. Pl. 48.** Background volutes-and-triangles; three consecutive dragons (heads inwards; fig. 15), with open zigzag lozenges; in the central field three more consecutive dragons and a human figure. *Shou-chou region*. Diam. 19.7 cm. Lagrelius collection.

- E 36. Pl. 48.** Background lozenges with spiral and granulation filling; three consecutive dragons (heads inwards), with open zigzag lozenges. An Osaka collection. Umehara, Kanizen pl. 28: 2.

- E 37. Pl. 48.** Background lozenges with spiral and granulation filling; three consecutive dragons (heads inwards; fig. 15), with open zigzag lozenges; here, as in the following types, the «zigzag» element is greatly reduced, in this specimen being only faintly traceable in a few places; in an inner zone, four bird bodies and wings (the heads being concealed by the central field). *Shou-chou region*. Diam. 12 cm. Lagrelius collection.

- E 38. Pl. 48.** Background volutes-and-triangles; three consecutive dragons (heads inwards; fig. 15), with open zigzag lozenges, hooked on to one another. *Shou-chou region*. Diam. 18 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 63.

- E 39. Pl. 49.** Background volutes-and-triangles; three consecutive dragons (feet against the rim; fig. 15), with a row of zigzag-lozenge elements: two halves and one whole (open); *Shou-chou region*. Diam. 14 cm. Lagrelius collection.

- E 40. Pl. 49.** Background lozenges with spiral and granulation filling; three pairs of dragons; in each, one head facing inwards, one head facing outwards, the latter having the jaws wide-open and biting against the rim (fig. 15). *Shou-chou region*. Diam. 14 cm. Hellström collection.

- E 41. Pl. 49.** Background volutes-and-triangles; three pairs of dragons; in each, one head facing inwards, one facing outwards, the former having two zigzag lozenges worked into its wing and tail (fig. 15). *Shou-chou region*. Staatl. Mus. Berlin.

- E 42. Pl. 50.** Background volutes-and-triangles; three pairs of dragons (one dragon facing outwards and one inwards), each dragon with jaws wide open and biting over a bend in the other's body (fig. 15). *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. Yamanaka, Osaka. Umehara, Kanizen pl. 28: 4.

A mirror of the same kind. Bidwell collection. Umehara, Seikwa 4: pl. 37 and Kanizen pl. 27: 5.

- E 43. Pl. 50.** Background volutes-and-triangles; the *décor* zone divided into an inner zone, with very clear dragons (three antithetical pairs), and an outer zone with only deformed remnants of dragon figures. Becker and Newmann, Köln.
- E 44. Pl. 50.** A most unusual mirror; in the somewhat large central field is inserted a starshaped central band (with the same background as the *décor* zone) adorned with two loosely twisted strings; background in the *décor* zone lozenges with spiral and granulation filling; four consecutive arabesques (dissolved dragons) ending in open zigzag lozenges. A. Michon, Paris.
- E 45. Pl. 50.** Background volutes-and-triangles; a continuous garland of arabesques (remnants of dissolved dragons), here and there heart-shaped petal embellishments, as in E 17 above. Staatl. Mus. Berlin.

We observed above that category C (comma-pattern background) was essentially a Shou-chou region class, and in my earlier discussions, anticipating the results of the investigations concerning the present E class, I have already mentioned that manifestly category E is also a Shou-chou region class. Indeed, the data are sufficiently numerous to be entirely convincing. Of our 58 mirrors in this class, 37 (viz. E 1, 2, 5 a, c, 6—9, 11, 14—20, 22 a, b, 23, 24 a, b, 25, 26, 28—31, 33 a, 34, 35, 37, 38 a, b, 39—42) are reported to come from the Shou-chou region, as against 4 from the Lo-yang region (4 b, 5 d, e, 33 b), and to three of these latter there correspond identical mirrors known to come from Shou-chou. Moreover, Lo-yang specimens such as 5 d and e are of poor quality, as compared with the beautiful Shou-chou specimen 5 a, and are clearly imitations of a Shou-chou type ineptly made by Lo-yang artists not familiar with this kind of *décor*. The further discussion of our category E will be deferred until we have described category F below.

CATEGORY F.

This category comprises two sections, which at first glance may seem to be somewhat dissimilar, but which a detailed analysis will show to be closely allied. The first section shows the figures in a high thread relief, the second in a flat relief, reminiscent of that in category E above. All the specimens in the first section and the great majority of those in the second have all or at least some of the principal lines in the drawings divided into two parallel lines close together; what I shall call «double-lines». In some cases the lines are even tripled (as in F 1).

The mirrors F 30 and 31 with the starshaped outer margin are exceptions; as a rule there is always the «Shou-chou rim», i. e. the concave rim with the outer part rising into a high ridge, which is here nearly always a sharp edge. The setting-off of the central field, the central band and the rim by additional raised lines (sometimes with slanting

strokes) and the adornment of the intermediate narrow space with slanting strokes are features similar to those in cat. E above.

These general features having been once pointed out, they will not be repeated in the descriptions of the individual mirrors.

F 1. Pl. 51. Background volutes-and-triangles and, alternating with this, a new pattern not met with in the preceding categories: bundles of straight parallel lines, one group of such lines placed at a sharp angle against another group; I shall call this pattern »converging groups of parallel lines». In the central field two crouching animals, tails extended to the right, the heads placed on the knob with noses joined (better seen on F 2 below); the central band inscribed: »Great joy, prominence and wealth, a thousand autumns and ten thousand years; may you have wine and food»; the end of the line is marked by the picture of a fish. In the décor zone, on short »stalks», long petals reaching to the rim, extremely stylized by curves and volutes, and drawn out into a triple point; we may call it a »brush-like petal»; four antithetical dragons (heads outwards), jaws wide open and biting over a bend in the body (fig. 15). *Shou-chou region*. Diam. 18 cm. Lagrelus collection.

A mirror of the same kind. *Shou-chou region* (Ku-shī hien). Diam. 16.3 cm. Hallwyl collection. Umehara, Seikwa 4: pl. 33.

A mirror of the same kind. *Shou-chou region*. Karlbeck collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. *Shou-chou region*. Imperial Household Museum, Tokyo. Umehara, Kanizen 24: 2.

A mirror of the same kind. Umehara, Kanizen pl. 23: 3.

Three mirrors of the same kind. *Shou-chou region*. Yen'k'u figs. 71—72.

Three more very similar mirrors (inscriptions different). *Shou-chou region*. Yen'k'u figs. 70, 74, 75.

F 2. Pl. 51. Very similar to the preceding, but the dragons slightly different (some more embellishing hooks). *Shou-chou region*. Karlbeck collection.

F 3. Pl. 51. Background volutes-and-triangles, otherwise very similar to the preceding two, but the dragons much more highly embellished by »curl borders» on the lines. There is also a variant in the inscription (»great joy, prominence and wealth, may you obtain what you love»); another instructive feature is the incongruence between the principal décor and the décor zone: the latter having been too wide, the former does not reach the rim, and all round we can see rudiments of new sets of dragons at the margin. *Shou-chou region*. Diam. 12.4 cm. MFEA (K. 10 599: 548).

A mirror (fragmentary) with exactly identical dragon figures, but with a different inscription (»Great joy without end»). *Shou-chou region*. MFEA (K. 10 599: 549).

F 4. Pl. 52. Very similar to the preceding, but the dragons less elaborate, and an inscription in 14 characters, unfortunately illegible. Same background, discernible though almost obliterated; animals in central field carelessly abbreviated. *Shou-chou region*. MFEA (K. 11.000: 528).

A mirror of the same kind. *Shou-chou region*. MFEA (K. 10.599: 551).

F 5. Pl. 52. Very similar to the preceding ones, but more elegantly drawn, with «curl borders» in elegant flourishes, and a different inscription: «May we always think of each other and not forget each other; great joy without end» (line ends with a drawing of two fishes). Yamanaka, Osaka. Umehara, Seikwa 4: pl. 34 and Kanizen pl. 24: 1.

Two mirrors of the same kind, but without inscription; diam. 14 cm. Lambert collection. Swallow pl. 503, pl. 520.

F 6. Pl. 52. Very similar to the preceding ones, though differing in details; no animals in the central zone and no inscription. *Shou-chou region*. Imperial Household Museum, Tokyo. Umehara, Kanizen pl. 23: 1.

F 7. Pl. 53. Background volutes-and-triangles, otherwise very similar in most features to F 1 above, but a long inscription, which starts in the central band and continues in the band close to the rim. («Its [the mirror's] interior has a pure substance and thereby it reflects the light; its brilliance is like the sun and moon» etc.); for this type of inscription cf. Yetts in Burl. Mag. 1939. *Lo-yang region*. Diam. 13.8 cm. Lagrelius collection.

Two mirrors of the same kind. *Shou-chou region*. Yen'k'u figs. 76, 77.

F 8. Pl. 53. Background converging groups of parallel lines, some being ordinary lines, others granulation lines; animals in the central field not clearly discernible; in the décor zone three «brush»-like petals, as in all the preceding; a wavy line with peaked elevations here and there (mountains?, cf. the common incense-burners of Han time) and above this three consecutive dragons (heads inwards; see rubbing pl. 53); the same kind of inscription as F 7 above. *Shou-chou region*. Lagrelius collection.

A mirror of the same kind. Sedgwick collection. Yetts, Burl. Mag. 1939.

A mirror quite like the preceding, but no inscription at the rim; diam. 16.5 cm. Lambert collection. Swallow pl. 524.

F 9. Pl. 54. Background volutes-and-triangles; in the central field an animal with the head applied to the knob and the four feet and the cleft tail spread round it; in the décor zone three consecutive «arabesques» (remnants of dragons) ending in figures which are corrupted forms of the open zigzag lozenge (fig. 15); between the arabesques three animals, standing against the rim but with one foot raised high above the head, and biting in a loop of the principal dragons; from the rim, under the «lozenge» ends, some low mountain peaks. *Shou-chou region*. Diam. 11.6 cm. Mus. Aziat. Kunst, Amsterdam. Also in Maandblad 1935, p. 62.

A mirror of the same kind; diam. 11 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind, diam. 11.5 cm. Crown Prince collection.

A mirror of the same kind (rim broken off): *Shou-chou region*. MFEA (K. 10.599:554).

F 10. Pl. 54. Background volutes-and-triangles; in the décor zone four dragons very similar to those of F 1 and the following, but placed consecutively, and separated by four animals standing on the extra line of the central band, with one foot raised high, the body curved and the jaws biting in a loop of the principal dragon (fig. 15). *Shou-chou region*. Diam. 11 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 78.

- F 11. Pl. 54.** Quite the same type as the preceding, but with an inscription in the central band (»May we always think of each other and never forget each other, great joy without end«). *Shou-chou region*. British Museum.

A mirror of the same kind (badly incrustated, inscription hardly legible). *Shou-chou region*. (K. 10.599: 529).

- F 12. Pl. 55.** Background volutes-and-triangles; in décor zone three dragon-birds biting their own tails, and three »arabesques« (remnants of dragons); inscription (»Be careful that we think of each other and do not forget each other; constant joy without end«). *Shou-chou region*. Yenku fig. 49.

- F 13. Pl. 55.** Background volutes-and-triangles; in the central band an inscription (»great joy, prominence and wealth« — the rest illegible); in the décor zone three large figures, which really are entirely dissolved dragon shapes (fig. 15); we find exactly the same figure in F 40 below, where it is more easy to grasp; between the three dissolved dragons there are three bird-dragons (heads outwards; fig. 15), biting their own tails and with the loop-like wings hooked into the dragon arabesques. *Shou-chou region*. Diam. 11 cm. Lagrelius collection.

A very similar mirror, but without inscription. *Shou-chou region*. Yenku fig. 53.

- F 14. Pl. 55.** Background volutes-and-triangles, and converging groups of parallel lines; in the décor zone a jumble of animals, three consecutive groups consisting of: two long dragons back to back, then a single long dragon attacked by three dogs (fig. 15 *bis*). Hirose collection, Kyoto. Umehara, Kanizen pl. 25: 2.

- F 15. Pl. 56.** Background volutes-and-triangles; in décor zone four »brush«-like petals, as in F 1 etc.; between them four groups showing snake-dragons biting a limply hanging animal and attacked by five dogs (fig. 16). Imperial Household Museum, Tokyo. Umehara, Kanizen pl. 25: 1.

- F 16. Pl. 56.** Background converging groups of parallel lines, some being entire, others granulation lines; in the central field three running men and three animals (tigers?); in the principal décor field four »brush«-like petals and undulating lines with »mountain« peaks, and human figures and birds inserted (heads outwards). A Kyoto collection. Umehara, Kanizen 30: 1.

- F 17. Pl. 56.** Background converging groups of parallel lines (some whole, some granulated); in the central field four dragons; in the décor zone stylized mountain peaks, the landscape filled with human figures standing, sitting and playing instruments, riding tigers, stretching their hands towards dogs(?); diam. 16 cm. Freer Gallery of Art, Washington. Umehara, Kanizen pl. 30: 2. Rev. A. A. 1934, pl. 57.

- F 18. Pl. 57.** Background volutes-and-triangles; TLV (sun-dial) arrangement; four big dragons (fig. 16 *bis*) of two different types; inscription (»peace and joy without end«). Musée Guimet. Umehara, Seikwa 4: pl. 41 and Kanizen 29: 2.

- F 19. Pl. 57.** Background volutes-and-triangles, and converging groups of parallel lines. TLV arrangement; round the knob two animals similar to those of F 1-2 above;

inwards from the square central band palmette-like figures; from the corners of the central band four »brush«-like petals; these are flanked by antithetical dragons of two types (fig. 16), one type being well constructed, the other reduced to rudiments; in the outer part of the zone, the V's are filled with strongly simplified animal figures (birds, the beak holding a curled twig? fig. 16), and between the V's across the L's there are dragon figures with heads strongly corrupted; in the central band and on the rim a long inscription of the same kind as in F 7 above. *Shou-chou region*. Diam. 19 cm. Lagrelius collection.

F 20. Pl. 57. Very similar to the preceding, but without inscription. Yamanaka, Osaka. Umehara, Kanizen 29: 1.

F 21. Pl. 58. Background as the preceding two; animals round the knob similar to those of F 1-2; TLV arrangement; to the left of the V's four dragons (heads inwards), the head bent back, seen from above, and biting over a bend in the body (fig. 16); to the right of the V's only detached rudiments of dissolved dragon bodies, inside the rim a line with slanting strokes (rope pattern); in the central band an inscription (»great joy, prominence and wealth, may you obtain what you love, a thousand autumns and ten thousand years; may you have extended years and increased longevity«). *Shou-chou region*. Imperial Household Museum. Umehara, Kanizen pl. 24: 6. The four following are all of poorer quality:

A mirror of the same kind, *Shou-chou region*. Diam. 11.7 cm. MFEA (K. 10 600: 92).

A mirror of the same kind. *Shou-chou region*. MFEA (K. 10 600: 93).

A mirror of the same kind. *Lo-yang region*. Diam. 10.8 cm. Lagrelius collection.

A fragmentary mirror of the same kind. *Shou-chou region*. MFEA (K. 10 599: 532).

Three mirrors of the same kind. *Shou-chou region*. Yen-k'u figs. 80—82.

F 22. A mirror quite like F 21, but without the line of slanting strokes. *Shou-chou region*. Diam. 12 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. British Museum.

A mirror of the same kind. *Shou-chou region*. MFEA (K. 10 600: 91).

A mirror of the same kind. *Shou-chou region*. MFEA (K. 11 035: 26).

A mirror of the same kind. *Shou-chou region*. Yamanaka, Osaka. Umehara, Kanizen 24: 5.

F 23. Pl. 58. Very similar to the preceding type, but the décor zone is further reduced so as almost to exclude the L and V region; Diam. 11.3 cm. Crown Prince collection.

A mirror of the same kind. *Shou-chou region*. Yen-k'u fig. 83.

A similar mirror, even more reduced (L and V parts entirely disappeared). *Shou-chou region*. Hallwyl collection. Hallwyl cat. E 6.

F 24. Pl. 58. Background volutes-and-triangles; in décor zone three consecutive dragons (heads inwards) with tails ending in zigzag lozenges (fig. 16), widely gaping mouth, teeth showing. The dragon picture is here not double-lined, but very closely

akin to that of F 25 below, which has the typical double lines of this category. *Shou-chou region*. Diam. 16.4 cm. Museum van Aziat. Kunst, Amsterdam. Maandblad 1935, p. 62.

- F 25. Pl. 58.** Background volutes-and-triangles; in décor zone three consecutive dragons (heads inwards), with tails ending in zigzag lozenges (fig. 16). *Shou-chou region*. Diam. 15.8 cm. Hellström collection.

A mirror of the same kind; diam. 16.5 cm. *Shou-chou region*. MFEA (K. 12.420).

- F 26. Pl. 58.** Very similar to the preceding (dragons double-lined), but for an extra line of slanting strokes inside the rim. *Shou-chou region*. Diam. 18.7 cm. MFEA (K. 10 599: 524). Also in Kümmel, Kunst pl. 27.

- F 27. Pl. 59.** Background volutes-and-triangles; in décor zone three consecutive dragons (heads inwards), with tails ending in zigzag lozenges, hooked on to each other (fig. 16). Art Inst. Chicago. Umehara, Seikwa 4: pl. 36.

- F 28. Pl. 59.** Similar to the preceding, but dragons somewhat different (fig. 16). *Shou-chou region*. Staatl. Mus. Berlin.

- F 29. Pl. 59.** Elements the same as in F 27, but dragons different (fig. 16). Diam. 15.8 cm. Hellström collection.

A mirror of the same kind. Yamanaka, Osaka. Umehara, Kanizen pl. 28: 5.

- F 30. Pl. 59.** Elements the same as in F 27, but dragons different (fig. 16), and furthermore there is a star-shaped margin, an unusual feature in this category. *Shou-chou region*. British Museum. Br. Mus. Quarterly 1935, pl. 39.

A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 65.

- F 31. Pl. 60.** Quite similar to the preceding, but the central band has an inscription in stylized Small Seal, which cannot be earlier than late 2nd c. B. C. (»The roads are long and distant; on them are passes and fords; the mirror does not conceal the feelings; be careful that we do not forget each other«). Diam. 18.5 cm. Lagrelius collection.

- F 32. Pl. 60.** Background volutes-and-triangles; in décor zone three consecutive dragons (heads inwards), with the head turned back, and a loop from the forepart ending in a zigzag lozenge (fig. 16), dragons hooked on to each other. *Shou-chou region* (Ku-shī-hien). Diam. 16.1 cm. Hallwyl collection. Hallwylska Samlingen pl. I: E 5.

- F 33. Pl. 60.** Elements same as in the preceding, but dragons somewhat different (fig. 16). Museum of Fine Arts, Boston.

- F 34. Pl. 60.** Elements same as in F 32, but dragons different (fig. 16); only the zigzag lozenges are here double-lined. *Shou-chou region*. Diam. 11.2 cm. Hellström collection.

- F 35. Pl. 61.** Background volutes-and-triangles; in décor zone, first, three consecutive dragons (heads inwards) with a loop to the right ending in zigzag lozenges (fig. 16), secondly, three smaller consecutive dragons (heads inwards) behind the bodies of the large ones (fig. 16). *Shou-chou region*. Diam. 23 cm. Lagrelius collection.

- F 36. Pl. 61.** Background volutes-and-triangles; in décor zone three big consecutive dragons (heads inwards), with zigzag lozenges close behind the head, and drawn

out into very long loops, and across them three smaller dragons (heads outwards), with head seen from above (fig. 16). *Shou-chou region*. Diam. 18 cm. Lagrelius collection.

- F 37. Pl. 61.** Background volutes-and-triangles; in décor zone three big dragons with weird loops on each side running into zigzag lozenges, the latter connecting up with the contiguous lozenge so as to form long-drawn-out compound figures; inside one loop of the big dragon there is a free, smaller dragon; and finally, near the rim, outside the compound-lozenge figures, there are three more dragons. *Shou-chou region*. Diam. 17 cm. Lagrelius collection.

A similar mirror. *Shou-chou region*. Asano collection, Osaka. Umehara, Kanizen pl. 27: 1.

- F 38. Pl. 62.** Background volutes-and-triangles; in décor zone three consecutive dragons (heads inwards, fig. 16), and, between them, three bird-dragons (heads outwards; fig. 16), biting their own tails and with the loop-like wings hooked on to the dragons; these bird-dragons are exactly like those of F 13 above, of the thread-relief section, and nicely connect our flat-relief section here with the thread-relief section. The arrangement of F 13 and F 38 is, indeed, much the same. *Shou-chou region*. Diam. 14 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 56.

- F 39. Pl. 62.** Very similar to the preceding, but dragons somewhat different. *Shou-chou region*. Seligman collection.

- F 40. Pl. 62.** All elements (except for the absence of an inscription) are exactly the same as in F 13 above; the true dragons of F 38, 39 are here dissolved into mere arabesques with zigzag lozenges; this is a perfect flat-relief counterpart to the thread-relief mirror F 13. Our mirror here has no double-lines, but the «Han curl borders» which we shall discuss presently. Diam. 13.5 cm. Crown Prince collection.

A mirror of the same kind. *Shou-chou region*. Emil Hultmark collection.

A mirror of the same kind. *Shou-chou region*. Staatl. Mus. Berlin.

A mirror of the same kind. *Shou-chou region*. Sedgwick collection.

A mirror of the same kind. A Kyoto collection. Umehara, Kanizen pl. 26: 4.

- F 41. Pl. 62.** Quite similar to the preceding, but dragons double-lined. *Shou-chou region*. Malmö Museum.

A mirror of the same kind. *Shou-chou region*. Oppenheim collection.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 55.

- F 42. Pl. 63.** Quite similar to F 40, but for two important deviations: double-lined dragons, and Han time inscription («May we always think of each other, and not forget each other; constant joy without end»). This mirror is extremely important for the dating of the whole group F 38—45. A Kyoto collection. Umehara, Kanizen pl. 26: 3.

A mirror of the same kind. *Shou-chou region*. Yenku fig. 54.

- F 43. Pl. 63.** Very similar to F 40, but the arabesque remnants of the dragons are still more simplified. The bird-dragon is quite the same. *Shou-chou region*. Diam. 12.5 cm. Lagrelius collection.

F 44. Pl. 63. Background and bird-dragons as F 38 and following, but the dissolved dragons still more reduced, eliminating also the zigzag lozenge (fig. 16). *Shou-chou region*. Diam. 9.5 cm. Lagrelius collection.

A mirror of the same kind. *Shou-chou region*. Yen-k'u fig. 51.

F 45. Pl. 64. Very similar to the preceding, but arabesques slightly different. Becker & Newmann, Köln.

A mirror of the same kind. *Shou-chou region*. Yen-k'u fig. 52.

F 46. Pl. 64. Background volutes; in décor zone arabesques as remnants of dissolved dragons, and badly deformed zigzag lozenges. *Sü-chou-fu*, Kiangsu. Swallow pl. 42.

F 47. Pl. 64. Background volutes; in décor zone four dragons (heads inwards), of which two have lozenges (no longer zigzag'ed), very fancifully embellished. Stated to come from the Kin-ts'un graves, which is very unlikely: both the background and the treatment of the dragons is very late and corrupt; it cannot possibly be pre-Han. White, Tombs pl. 46. Umehara, Rakuyō pl. 47: 2.

F 48. Pl. 64. Background volutes-and-triangles; in décor zone arabesques that are remnants of dissolved dragons. I have very much hesitated whether to place this mirror in category E above; but there is a certain affinity with F 24, and the crowded décor savours much more of our category F here. Diam. 12.2 cm. Crown Prince collection.

Our category F is the third great Shou-chou category. It was explained above how category C (comma-pattern background) was above all a Ch'u kingdom group, most of the specimens of that category with a known provenience hailing from the Shou-chou region. And the same was the case with our category E, the great group of flat-relief dragon mirrors which we have described above, but the more detailed historical discussion of which we deferred until we could include that of category F as well. It should be emphasized that category F is well attested as being essentially a Shou-chou region class. There are a great number of mirrors in this class known to have come from the Shou-chou region, no less than 71 (as recorded above). Against this there are only two specimens (7, 21 d) known to come from the Lo-yang region (possibly three, F 47). This fact, that both categories E and F are clearly Shou-chou categories, is of extreme importance when we now proceed to examine in detail their chronological position.

I have already stated briefly in an earlier connection that there are reasons to believe that category E dates roughly ca. 250—ca. 200 B. C.; it now becomes necessary to revert to this question in greater detail.

The dating of cat. F has been extensively studied in my introductory chapter (p. 15 ff.) because of its inscribed mirrors, and is securely established: cat. F is of the 2nd c. B. C.; and it was a Shou-chou region category just as much as cat. E. The question is now

this: if they are both bound up with the Shou-chou region, how can we know that they are not contemporaneous? This has, in fact, been generally taken for granted by earlier authors, and we must go into this question seriously. It is only natural that the two categories should have been regarded as one, all their specimens of approximately the same period, for they are indeed very much akin. What, then, are my reasons for dividing all these Shou-chou mirrors into two classes, E and F, and for refusing to believe that our category E was of the 2nd c. B. C. (early Han) as well as F?

Let us first describe the criteria on the basis of which I have set apart our mirrors E 1—45 as distinct from our mirrors F 1—48.

a. Our E mirrors always have their animals in low flat relief, very similar to that of our Lo-yang category D (of pre-Han age) above. Our F mirrors have one large section, a great many mirrors of 23 different types (F 1—23), which is characterized by a relief in narrow, high, rounded threads, fundamentally different from the relief in cat. E. The rest of the category (F 24—48) have the same flat relief as our cat. E, and are placed in group F for other reasons, as described under *β*, *γ* and *δ* below.

β. The principal lines in the dragon bodies and their appendices in cat. E are never divided into two; they are more or less broad, flat bands, whole and undivided. In cat. F we find, as a rule, that all or at least some of the principal lines in the drawings are divided into two (rarely three) parallel lines. This division of the figure lines into two parallel strands obtains in all the first section of cat. F (F 1—23) and, in addition, the 15 types F 25, 26, 30—37, 41—45 in the second section. There remain 10 types 24, 27—29, 38—40, 46—48 in the second section which have no such double lines, and they are placed in cat. F, not in E, for other reasons, as described in *γ* and *δ* below; but let us point out here that most of them have a close similarity to other types with double lines: F 24, 27—29, 38, 39 have very peculiar dragon heads, which are identical with or closely akin to those of F 18, 19, 30—33, 35, 36; F 38—40 have that highly characteristic bird, biting its tail, which we find both in F 13 (first section, thread relief) and in F 41, 43—45 (second section, with double lines), and in F 42 (double lines and Han inscription).

γ. On the clean bands in the figures of cat. E we find here and there various kinds of embellishments, small petals, wing-like hooks or volutes etc. This may be at corners where two bands meet (e. g. E 11, 14 etc.), at salient points of the animals's bodies (e. g. E 8, 17 etc.), and quite particularly on the outside of long sweeping curves or loops (E 6, 7, 15 etc.). In cat. F this tendency has grown into a system of very overloaded embellishments: hooks, curls and volutes on the lines are much more crowded, and often grow into a veritable row of curls, what I should like to call «the Han curl border». This phenomenon is more conspicuous in some specimens than in others: in F 1 it is not very pronounced. In F 6, F 18, 19, 21—23 (of the thread relief section) and in F 28—31, 34, 39, 40 (of the flat relief section) it is strongly emphasized, and sometimes (as in F 30) it has been carried so far that instead of the smooth, clean bands of cat. E we find a jumble of curls which confuse and almost obscure the leading lines in the picture.

That this «Han curl border» is indeed typical of the Han art is evidenced by many specimens datable in Han time through inscriptions or find circumstances. We find it, in fully developed form, on a Hu flask with a Han-time inscription, published by Yetts in the *Burl. Mag.* 1931, p. 240, of which we show here the ornament on the lid (fig. 17 a). Again, we have it in the textiles of Noin Ula (Kümmel, *Kunst* pl. 50), of which we give a detail here (fig. 17 b). It recurs on various objects of the Lo-lang finds, e. g. Harada, *Lo-lang* pl. 50, *Tomb of Painted Basket* pl. 51 etc.¹ This «Han curl border»



Fig. 17 a—b.

does not exist in our cat. E; it is exclusively a feature of cat. F. The element «Han curl border» places our mirror types F 24, 27—29, 38—40, 48 — which had neither the thread relief (α), nor the double lines (β) — in our cat. F, as opposed to cat. E.

δ . The décor zone in cat. E is generally well filled up by the lively dragon figures, but never overloaded, never really crowded. In cat. F there is a marked tendency to cram the whole zone as full as possible; it is less natural, free and «airy», artistically less clean and sober than cat. E. There are, of course, various degrees in this respect; some F mirrors (like F 43, 46) are not at all crowded, but the great majority are decidedly overloaded, and a good many types are so to an extent that is unthinkable in cat. E. This is really a fundamental and deep contrast between the two groups. And it serves to corroborate definitely the placing of such mirror types as F 24, 27, 28, 47, 48, which had neither the thread relief (α) nor the double lines (β), in our cat. F, in contrast to cat. E.

Having thus established, by means of criteria α — δ , a decided contrast between our categories E and F, we may go on and point out two more fundamentally important contrasts between the two categories:

ϵ . In our category E there are two parallel types of background pattern: the «lozenges with spiral and granulation filling», and the «volutes-and-triangles», both well-known from our study of the pre-Han category D above. They are «parallel» in our cat. E, for they occur side by side in mirror types that are exactly alike in other respects (e. g. E 17 and E 19). Indeed the former (lozenges with spiral and granulation filling), which is of paramount importance to our argumentation here, occurs in no less than 16 cases (E 5, 8, 17, 18, 20, 23, 25, 26, 28, 29, 31, 32, 36, 37, 40, 44). In our category F there is not a single example of the «lozenges with spiral and granulation filling». On the other hand, the F category introduces a new type of background filling: the «converging groups of parallel lines». This we find in many cases in cat. F (F 1, 2, 8, 16, 17, 19—23) but not a single case in cat. E.

¹ A kindred modification: a slightly wavy edge instead of the smooth straight edge line in the bands of cat. E may be observed in a few specimens (e. g. E 7); this ornamental trick has survived into Han time, where we find it in the Noin Ula textiles, Kümmel, *Kunst* pl. 59.

ζ. In the E category there are no mirror types at all that carry inscriptions. In category F, on the contrary, inscriptions are common. In its first section (the thread relief section) we find them in 15 types (F 1—5, 7, 8, 11, 12, 13, 18, 19, 21—23). In the second section (flat relief, but divided lines, Han curl border, crowded décor) it is rare, but we find fine Han-time inscriptions in the important specimens F 31 and F 42.

η. In category E there are no mirror types with the TLV arrangement (sun-dial symbol). In the first section of category F we find it in six types (F 18—23).

This long array of facts that distinguish categories E and F ought to have made it abundantly clear that we here have to deal with two groups which, in spite of their great affinity, are nevertheless in many respects neatly distinguished. If they had been the products of two different cultural centres, it would have been tempting to suppose that they were contemporaneous but geographically distinct groups. This, however, is excluded, since they are both definitely localized in the Shou-chou region. Is it then probable or even possible that they may have been produced there, side by side, during one and the same period?

That possibility is, I believe, practically excluded, as will be seen from a consideration of some of our criteria above:

a. The E mirrors, like the F types, have a big central band, admirably suited for an inscription. F mirrors were made in Shou-chou during the 2nd c. B. C. and often adorned with an inscription in this central band; if E mirrors had been made in Shou-chou during the same century, why should they never have been furnished with an inscription in that same central band? The conclusion is obvious: the E mirrors have no inscription because they were made in Shou-chou at a period anterior to the 2nd century, when the custom had not yet arisen of adorning mirrors with inscriptions.

b. F mirrors with TLV décor (thread relief section) were cast in Shou-chou in the 2nd c. B. C. If E mirrors (i. e. those with flat relief in undivided lines, without »Han curl borders» and with uncrowded décor) had been made in Shou-chou during the 2nd century, it is inconceivable that no E mirrors (features as just stated) should ever have been furnished with the TLV arrangement; since there are no such specimens, the E mirror types belong to a period anterior to the birth of the TLV mirror.

c. The mode of filling the background with geometrical patterns was still in full swing in the 2nd c. B. C. The F category of Shou-chou, of that century, had volutes-and-triangles and converging groups of straight parallel lines; category E had volutes-and-triangles and lozenges with spirals and granulation. If category E was produced in Shou-chou during the same period as category F, why should the E mirrors (those with flat relief in undivided lines, without »Han curl borders» and with uncrowded décor) alone, and never the F mirrors (thread relief, divided lines, »Han curl border,» crowded décor) have lozenges with spirals and granulation, and why should the F types, but never the E types, have converging groups of parallel lines? The conclusion must be that the E mirrors belong to an earlier period (pre-Han), when lozenges with spirals and granulation were still a living décor theme, which died out before ca. 200, and when the converging groups of parallel lines had not yet been introduced as a background

pattern. This conclusion, as far as the «lozenges with spiral and granulation filling» are concerned, really forms only a part of my general argument about that pattern advanced in connection with our Lo-yang cat. D, p. 71 above. There I showed that this background pattern was «synonymous» and interchangeable with the «interlocked T's» pattern and the «granulation-bordered zigzag lozenge» pattern, which were proved to be pre-Han, never occurring in the Han era. There, too, I stated that this third pattern: lozenges with spiral and granulation filling, never occurs in those various categories (F, H, J, K) which can be proved by inscriptions to be early Han (2nd century), and that it may therefore be defined as a pre-Han pattern.

We could continue with the same kind of argumentation regarding the «Han curl border» and the «crowded animal décor zones», which evidently did not exist in the pre-Han category E and were new features introduced in the early Han F category.

The summing up of all these arguments is briefly this: the mirror types which we have placed in cat. F were the products of the earliest part of the Han dynasty (2nd c. B. C.); the mirror types which we have placed in cat. E were earlier, and therefore belong to pre-Han times. The thread relief, the double-line drawings, the «Han curl border», the crowded décor zone, the addition of ornamental inscriptions, the TLV arrangement and the parallel-line background pattern were innovations of the early 2nd c. B. C. which had not yet been created when, in the 3rd c. B. C., the Shou-choq artists cast their beautiful mirrors of our cat. E.

It is unfortunate that closed finds are not there to confirm this conclusion about the pre-Han date of category E. But there are some highly interesting corroborative facts which deserve attention.

One of them concerns the type E 5 with the beautiful bird-dragon with a plume waving forwards from the neck. This weird and peculiar beast has a very near relative in the dragon on the famous jade disc belonging to the William Rockhill Nelson Gallery of Art, Kansas City, published both by White (pl. 181) and Umehara (Rakuyō pl. 91) as coming from the Kin-ts'un tombs; its pre-Han date is certain, for the disc is covered by the comma pattern. We give here two drawings, the one to the left (fig. 18 a) being the dragon on our E 5 mirror, the one to the right the dragon of the jade (fig. 18 b).



Fig. 18.

Another interesting phenomenon concerns the petal on a long stalk which we find in both categories E and F. We found the prototype already in class C above, and from class F it has passed on, in violently stylized form, into categories J and K. We can establish a typological evolution series as follows:

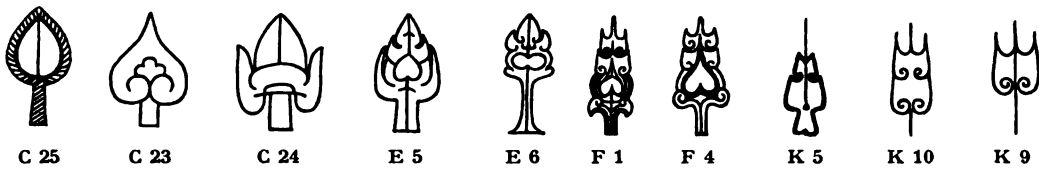


Fig. 19.

It will at once be seen that type E (the »bud«-like petal) represents an earlier stage than type F (the »brush«-like petal), which again is earlier than the following.

If, then, it may be considered firmly established that the E types are well distinguished from the F types and are anterior to the latter, being undoubtedly pre-Han, it remains to define their position in the pre-Han era more closely. To a large extent we have already done so earlier (p. 57 above), but we shall here revert to the same theme in greater detail.

In the first place, it must be kept in mind that this rich and artistically highly varied category E must be the immediate Shou-chou predecessor of the early Han category F, because there is, after all, in spite of the fundamental distinctions, very close kinship between the two groups, viz. in the general treatment of the dragons and the disposition of the décor. Category F may, indeed, be said to be a Han-time continuation, with radical innovations and modifications, of class E.

In the second place, it should be emphasized, as was already pointed out on p. 57 above that an epoch-making change in the Chinese mirror art, such as the creation of the E mirror class, could not be the result of the artistic activities in Shou-chou during the years of anarchy after Ts'in Shih-huang-ti's death (210—202 B. C.), nor of the short period of his united empire (221—210); it must be a creation of the greatest epoch of Shou-chou, of its period as capital of the Ch'u kingdom; this, of course, does not prevent the survival and continuation of the style during the immediately succeeding decades. Thus the E category must be dated roughly ca. 250—ca. 200 B. C.

To date it even earlier is hardly possible. We have seen above that the great Shou-chou category C (comma-pattern mirrors) extends through a very long typological evolution, and I have given in detail (p. 58) my reasons for believing that categories C and E did not overlap, did not live side by side in Shou-chou. Indeed, many features in the E class testify to the fact that it is later than all the C types. We have just seen an example of this in the successive stages of the petal. Another significant feature is the central band, which is larger (moved farther out) in the E class than in the C class, and standardized into the round version (as contrasted with the free choice between round and square central band in category C) — a sign of a further stage in the evolution. Again, the idea of a ledge with slanting strokes (rope pattern), which appeared very modestly in a few types of category C, but only on the central band, has been seized upon and greatly developed in category E: here it is not only applied to the bordering of the rim as well, but it is also emphasized and further developed to such an extent that an extra raised

line has been added and the space between filled with rope pattern — likewise a further development of a primary idea of the C class.

Thus category C was anterior to the category E; they did not overlap to any considerable extent. The question as to the chronological milestone between them has already been touched upon; I have suggested the time when Shou-chou became the capital of Ch'u and the principal cultural centre of that state, 241 B. C., or, more roughly expressed, the middle of the 3rd century, ca. 250 B. C.

This calculation of probability may now be confirmed by concrete *points d'appui*.

In our study of the Lo-yang category D above we came to the conclusion that the raising of the zigzag lozenge from its subordinate rôle of a background pattern into an element in the principal décor was comparatively late: it took place in the 3rd c. B. C. In our Shou-chou category E, which never has the zigzag lozenge as background pattern, we may be surprised to find this same zigzag lozenge figuring as part of the principal décor, here worked into the dragon pictures and therefore being of the variety that is open in the side. This phenomenon is quite obviously due to a Lo-yang influence on the Shou-chou art, and it cannot be older than the Lo-yang groups; consequently the creation of that section of category E which has the »open zigzag lozenge» at the tail or other parts of dragons cannot have been created earlier than well on in the 3rd c. B. C.

The Lo-yang influence was indeed quite strong. It is evinced, not only in the zigzag lozenge element but also, and above all, in the technique of the animal décor: this flat animal relief, unknown in the earlier Shou-chou category C, must have been directly imported from the Lo-yang category D.

The background patterns are furthermore of the greatest interest in this connection. We have seen that category E has two such patterns: lozenges with spiral and granulation filling, and volutes-and-triangles (the latter, in the types where the background is clearly discernible, are also joined into groups that form lozenges or squares). We found exactly the same two patterns earlier in the later section (3rd c. B. C.) of the Lo-yang D category, and an historical connection seems likely. Since the examples here in E are numerous and those in D are few, it would be tempting to say that in regard to these patterns it was Shou-chou that was the giver and Lo-yang that was the taker. But I do not think that this is the correct view of the loan procedure. In category D we can witness the organic birth and natural growth of the volute-and-triangle background. We had there, already in the earlier section (4th c. B. C.), the important background pattern »granulation-bordered zigzag lozenges» in competition with the »interlocked T's»; but it should be observed that these zigzag lozenges were regularly filled with volutes-and-triangles. On the other hand, we had two curious cases (D 7 and D 8) in which the scheme was already slightly simplified: the granulated border had been simplified into a simple line, and the zigzag movement had been greatly reduced, the side being nearly straight with only a very small sidestep in the middle. At the same time the lozenges were filled with volutes-and-triangles; one short step more: a definite straightening-out of the remaining slight zigzag in the sides, and we should already have had our regular »volutes-and-triangles» background pattern. I am therefore inclined to believe that, in spite of the

statistics, it was Lo-yang that first invented the volutes-and-triangles background in mirrors and was thus the giver, not the taker: when Shou-chou suddenly abandoned its long tradition and gave up the comma-pattern background (cat. C), and at a stroke introduced (cat. E) two new patterns (lozenges with spirals and granulation, and lozenges or squares with volutes-and-triangles), which already existed in the Lo-yang centre, it was due to the same Lo-yang influence that had brought to Shou-chou both the technique of animals in flat relief and the zigzag lozenge as elements in the principal décor (here in E attached to the dragons' tails). And if this is right, this loan from Lo-yang to Shou-chou cannot have been made earlier than well into the 3rd century, for it is only in the 3rd-century section of the Lo-yang category D that we find the volutes-and-triangles background.

Everything, therefore, combines to corroborate our earlier conclusion to the effect that category E of Shou-chou originated around 250 B. C. and lasted to ca. 200; in other words, it filled the second half of the 3rd c. B. C.

It only remains for us to make a brief remark concerning category F. We have seen that this category consists of two sections, one with thread relief (F 1—23) and one with flat relief (F 24—48). The latter is more closely related in this respect to the pre-Han category E than the former, and it would be tempting to assume that types F 24—48 are earlier than types F 1—23; in other words, that from the pre-Han (ca. 250—ca. 200 B. C.) category E, with dragons in flat relief, with undivided lines, no Han curl borders and no crowding of the décor the evolution passed on, in the first decades of the 2nd c. B.C., to dragon figures in the same flat relief, but now more or less cut up into double-lines, and with the addition of curl borders, arranged in a more crowded scheme in the décor zone; and that finally, say in the middle of the 2nd c., a further step in the evolution was taken: the flat relief was abandoned and the high, rounded, narrower thread relief introduced.

However tempting this may seem, I fear I cannot uphold such a theory, and for two reasons.

On the one hand, the two mirror types F 13 and F 40 are exactly alike except for the thread relief in the former and the flat relief in the latter. It is not very likely that there is a considerable time difference between these two variations of a highly elegant and complicated mirror scheme.

On the other hand, there is the mirror type F 31, which belongs to the flat-relief section. It carries an inscription which, to judge from the ductus of the script, cannot very well be dated early in the 2nd c. — it has indeed a ductus that is later than that of the inscribed types in the thread-relief section (F 1—5 etc.). The safest attitude is therefore to state simply that the whole of our category F belongs to the 2nd c. B. C., not venturing upon a more detailed chronology within the category.

CATEGORY G.

In the preceding chapters I had to investigate one pre-Han category, E, and one early Han category, F, together, because the typological and chronological argumentation necessitated their treatment in one context. Now we have to revert to pre-Han times, in order to describe another fairly extensive category (with many sub-categories), which could not very well be fully discussed before we had set forth the conclusions drawn from categories E and F.

The rim in this category is mostly the concave rim with high and edge-like outer part — the «Shou-chou rim». There is only one isolated case of a star-shaped outer margin (G 12). A few mirrors (types G 7, 8) have a rim which in the photos looks like the flat and broad rim of the early mirrors studied in category A—C above. But that is not correct. At any rate, the specimens belonging to the MFEA (G 8 below) have a very thin rim, very slightly concave: it is, in fact, not at all the flat rim of the early types, but the technique of the slightly concave decorative bands, such as we have studied in category C above, and such as revert here on mirrors G 1 and following, applied to the rim. Inside the rim, and outside the central band there is rarely a ledge, mostly an extra raised line (often rope-patterned), with slanting strokes filling the space between, as in category E above. All this being once stated, it will not be repeated in the individual mirror descriptions below.

G 1. Pl. 65. Round the central field a row of flower petals; from these — straight through the extra line of slanting strokes — project three «stalks» ending in heart-shaped petals with hook-like embellishments at the sides; background volutes-and-triangles; through the décor zone runs a broad, slightly concave starshaped band; outside this, three dragons, the long tail of each making a bend behind the star-band and filling the next outer arc-space, a heart-shaped petal as embellishment on the last loop of the tail; the bodies consist in part of slanting strokes, as also does half the breadth of the tail, exactly as in type C 63 above — a highly peculiar feature. Emil Hultmark collection.

G 2. Pl. 65. Background lozenges with spirals and granulation, three big dragons (heads inwards) outside the arches, three small ones inside the arches. *Shou-chou region*. Royal Scottish Museum.

A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 38.

A mirror of the same kind. Field Museum, Chicago. Umehara, Seikwa 4: pl. 11 and Kanizen pl. 7: 2, 7: 3.

G 3. Pl. 65. Background volutes-and-triangles; for the rest, the same elements as in the preceding, but the dragons different; diam. 14 cm. Lagrelius collection.

G 4. Pl. 66. Background volutes-and-triangles; for the rest similar to G 2 and 3, but instead of the small inner dragons there are in two places petals reminiscent of those in C 24 above; thus four big dragons and two small; diam. 16.8 cm. Art Inst. Chicago (Buckingham collection).

- G 5. Pl. 66.** Background lozenges with spirals and granulation; similar in arrangement to G 2 and G 3, but here, while the outer dragons have their heads turned inwards, the smaller (here bird-dragons) have their heads turned outwards. Michon collection, Paris.
- G 6.** General arrangement similar to that of the preceding ones, but the dragons are different and the borders of the dragons are slightly raised, reminding somewhat of the «thread» technique. There are two identical specimens of this type, collections David-Weill and Hosokawa (Umehara, Rakuyō pl. 45 and 46, Seikwa 4: pl. 12. Kümmel, Gedächtnis pl. 41. White, Tombs pl. 48), both stated to come from the Kin-ts'un tombs.
- G 7. Pl. 66.** Bare background; through the principal zone a star-shaped band (slightly concave). A Tokyo collection. Umehara, Kanizen pl. 7: 1.
A very similar mirror, stated to come from the Kin-ts'un tombs, *Lo-yang region*. White, Tombs pl. 51. Umehara, Rakuyō pl. 43: 2.
- G 8. Pl. 66.** Background volutes; same star-shaped band as the preceding. *Shou-chou region*. MFEA (K. 10 599: 541).
A mirror of the same kind. *Shou-chou region*. Diam. 17.4 cm. MFEA (K. 12.423).
A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 36.
- ✓ **G 9. Pl. 66.** Background volutes-and-triangles; in the décor zone a starshaped band. *Lo-yang region*. Diam. 19 cm. Crown Prince collection. Also photo in Swallow pl. 37.
A mirror of the same kind. Bidwell collection. Umehara, Seikwa 4: pl. 10 and Kanizen pl. 7: 4.
- G 10. Pl. 67.** Similar to the preceding, but the central field bare and the extra lines inside the rim and outside the central band have slanting strokes. *Shou-chou region*. Lagrelius collection.
A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 37.
- G 11. Pl. 67.** Similar to G 10, but the zone around the star-band is filled with circles. *Shou-chou region*. Moriya collection. Umehara, Kanizen pl. 7: 5.
- G 12. Pl. 67.** Background bare; here the star is moved out into a starshaped margin. *Shou-chou region*. Yamanaka, New York. Umehara, Seikwa 4: pl. 9 and Kanizen pl. 6: 3.
- G 13. Pl. 67.** Background bare; starshaped central band. Yamanaka, Osaka. Umehara, Kanizen pl. 6: 4.
- G 14. Pl. 67.** Background bare; outside the central band a star in raised lines. *Shou-chou region*. Diam. 21.2 cm. MFEA (K. 12.421).
A mirror of the same kind. *Shou-chou region*. Diam. 18,7 cm. Hellström collection.
A mirror of the same kind. *Shou-chou region*. Yen'k'u fig. 35.
Two mirrors of the same kind, one of them from *Shou-chou region*, Yamanaka, Osaka. Umehara, Kanizen pl. 6: 1, 2.
- G 15. Pl. 68.** Small central field with ledge of slanting strokes; décor zone volutes-and-triangles. *Shou-chou region*. Diam. 11.4 cm. Hellström collection.
- G 16. Pl. 68.** Similar to the preceding, but a bigger, bare central field and central band; diam. 12 cm. Crown Prince collection.

G 17. Pl. 68. Similar to the preceding two, but a line of slanting strokes outside the central band. Karlbeck collection.

A mirror of the same kind. *Shou-chou region*. Diam. 13.8 cm. Lagrelus collection.

A very similar mirror. *Shou-chou region*. Yen'ku fig. 6.

G 18. Pl. 68. Similar to the preceding ones, but a larger central field, with volutes-and-triangles. *Shou-chou region*. Diam. 16.5 cm. MFEA (K. 12.422).

G 19. Pl. 68. Small bare central field, four heart-shaped petals embellished by volutes; principal zone volutes-and-triangles. *Shou-chou region*. Diam. 10.2 cm. Crown Prince collection.

A very similar mirror (pattern on the petals slightly different). *Shou-chou region*. Staatl. Mus. Berlin.

G 20. A similar mirror, but with leaf-shaped petals and with four corresponding petals jutting out from the rim; said to come from the Kin-ts'un tombs, *Lo-yang region*. White, Tombs pl. 50.

The somewhat widely varying types which, for the sake of convenience, I have combined in this category G are not such exclusively Shou-chou types as the preceding ones, yet the Shou-chou specimens are the most numerous: nineteen mirrors, the Lo-yang specimens numbering only four.

The first section, G 1—6, is easily determined as being parallel with category E and hence as belonging to the 3rd c. B. C. There is, on the one hand, the background-pattern volutes-and-triangles (G 1, 3, 4) which, as we have seen, was introduced in Shou-chou only in the middle of the 3rd c., when it ousted the comma-pattern background, which until that time had reigned supreme in Shou-chou. On the other hand, there is alternatively (G 2, 5), just as in category E, the background-pattern lozenges with spirals and granulation, which, as we have discussed at length in the preceding categories, did not live on down into early Han time. There are, moreover, other features which make these mirrors akin to the E mirrors, e. g. the heart-shaped petals added as embellishments at angles of the dragon pictures, e. g. in G 1; this curious phenomenon we have previously found in E 17, 22, 23 etc. The big starshaped figure running through the décor zone is, on the other hand, executed in a technique (smooth, bare, slightly concave bands) with which we are familiar from the C-category mirrors of Shou-chou, of both the 4th and the 3rd c. Finally the slanting-stroked bodies of the dragons recall certain types in category C of the 4th—3rd centuries (C 59, 63, 76, 77).

The simpler mirrors G 7—G 12 are naturally associated with G 1—6 by their general décor scheme: it is, so to speak, the «skeleton» of the latter, without the rich animal embellishments.

The bare background and star theme of G 7 leads us to incorporate also G 13 and G 14 in this class.

The still simpler and plainer types G 15—20 are more difficult to place chronologic-

ally: their principal décor feature, the volutes-and-triangles, occurs, as we have seen, in both the 3rd and the 2nd c. B. C. But types G 15—18 are, as it were, equal to types G 9, 10 minus the star-band, in fact, a still more simplified scheme; and G 20 is reported to come from the pre-Han Kin-ts'un graves. The probability is that these last types likewise date from the 3rd c. B. C.

Thus our mirror category G here offers examples of types probably created at Shou-chou and spreading to a certain extent also to the Lo-yang centre, at a time when otherwise the E-category mirrors were the great and dominating fashion in Shou-chou. They are, so to speak, »side-issues», subsidiary types not nearly so common nor so richly varied, yet exquisitely worked, often large and striking specimens, and important enough to show the versatility and capacity for variation which characterized the Shou-chou artists during that era when Shou-chou was the capital of Ch'u (latter half of the 3rd c. B. C.).

CATEGORY H.

Our chapter on category G was, in a way, a side-step, and we shall now revert to where we left off: the category F of early Han time. Next in the series comes a smaller group, which indeed is nothing but an aftermath, a debased continuation of category F. In regard to features such as the rim, the central field and the general arrangement, it offers nothing new, but on one important point there is a novelty: many of these »Nachklang» mirrors are of a much whiter metal than the high-style mirrors of categories E and F. Some of them are of poor quality.

- H 1. *Pl. 69.* Background: a few volutes-and-triangles, mostly only coarse volutes; three dissolved petals, remnants of dragon arabesques. *Lo-yang region.* Diam. 10 cm. Lagrelius collection.
- H 2. *Pl. 69.* Background volutes; contours of two detached petals discernible; corrupted dragon figures. *Shou-chou region.* Diam. 8.4 cm. MFEA (K. 10 599: 539).
- H 3. *Pl. 69.* Background volutes-and-triangles; two stylized petals, two dragons (heads inwards) touching the petals. This specimen is of good quality, and perhaps it should be placed in category E above? The great simplification in the décor scheme seems, however, to indicate a later date; diam. 9.7 cm. Crown Prince collection.
- H 4. *Pl. 69.* Background volutes; three petals and dragons with zigzag lozenges. *Shou-chou region.* Staatl. Mus. Berlin.
- H 5. *Pl. 69.* Background volutes-and-triangles; three petals and remnants of dragons with zigzag lozenges. Mus. Fine Arts, Boston. Umehara, Kanizen fig. 21: 5.
- H 6. *Pl. 69.* Background slightly curved lines (remnants of volutes); three petals and loops with zigzag lozenges; in central field two characters (»Thousand [ounces of] gold»); in the lozenges are also characters, of which one only (»thousand») is clearly discernible. Lagrelius collection.

Three mirrors of the same kind. *Lo-yang region*. MFEA (K. 11.276: 111, K. 12.429, K. 11.092: 84).

A mirror of the same kind. Field Mus. Chicago. Umehara, Kanizen fig. 21: 6.

A similar mirror, but without inscription. *Shou-chou region*. Yen'ü fig. 59.

- H 7. Pl. 70.** Background volutes-and-triangles; three arabesques (corrupted dragons) with zigzag lozenges, in some places with »Han curl border«. *Shou-chou region*. Diam. 11.5 cm. Karlbeck collection.

A mirror of the same kind. *Shou-chou region*. Yen'ü fig. 61.

- H 8. Pl. 70.** Background bare; corrupted dragons similar to the preceding. *Honan region*. MFEA (K. 10.243: 20).

- H 9.** A mirror with the same décor pattern but with volutes-and-triangles background, with divided lines and with a ledge of slanting strokes at the rim. *Lo-yang region*. Yen'ü fig. 57.

- H 10. Pl. 70.** Background volutes; remnants of dragons with zigzag lozenges; diam. 9.5 cm. Lagrelus collection.

A mirror of the same kind, loops slightly different. MFEA (K. 11.033: 15).

- H 11. Pl. 70.** Background volutes and curved lines; remnants of dragons with zigzag lozenges. *Lo-yang region*. Diam. 7 cm. Lagrelus collection.

A very similar but not quite identical mirror. *Shou-chou region*. Diam. 7 cm. Hallwyl collection. Hallwylska Samlingen, pl. I: E 7.

- ✓ **H 12. Pl. 70.** Big bare central field; in décor zone, background volutes; connected arabesques (remnants of dragons), with nine small petals close to the rim. *Shou-chou region*. Diam. 12.3 cm. Lagrelus collection.

A mirror of the same kind. An Osaka collection. Umehara, Kanizen pl. 28: 6.

The mirrors of this class are obviously late »Nachklang« to the E and F categories, and are to be dated in the later part of the 2nd c. B. C. They occur both in the Shou-chou and the Honan regions. Their small and fluted knobs forbid our placing them still later in time.

CATEGORY J.

The mirrors of this category have the concave rim with high, edge-like outer part, which we have found in many classes above, particularly the Shou-chou classes C, E, F. Their metal is often much whiter than the E and F category mirrors.

- J 1. Pl. 71.** Square central field; in décor zone a background of volutes-and-triangles, volutes and curved lines; four dragons, double-lined, in thread relief; between them four circles filled with spirals. Mus. Fine Arts, Boston. Umehara, Seikwa 4: pl. 40: 1 and Kanizen fig. 21: 1.

A similar but not quite identical mirror (dragons slightly different, no spirals on bosses). *Shou-chou region*. Yen-k'u fig. 91.

J 2. Pl. 71. Central band of slanting strokes; in décor zone, background volutes, four dragons (heads outwards) in double-lined thread relief MFEA (K. 11.035: 70).

J 3. Pl. 71. Round central band; in décor zone same elements as in the preceding, with the addition of four bosses; diam. 7.7 cm. Lagrelus collection.

J 4. Pl. 71. Square central band with inscription (♫When you see the light of the sun, the world is very bright♫); in décor zone, background converging groups of parallel lines; combined curves (remnants of dragon arabesques) double-lined and in thread relief with small bosses at the angles; four bosses inside the principal curves. *Honan region* (Yen-ling). Diam. 8.7 cm. MFEA (K. 11.276: 112).

A mirror of the same kind; diam. 8.7 cm. Hellström collection.

A mirror of the same kind; diam. 7.2 cm. Lagrelus collection.

J 5. Pl. 71. Very similar to the preceding, but inscription different (♫Constant prominence and joy without end; may we not forget each other♫). *Lo-yang region*. Diam. 8.7 cm. Lagrelus collection.

A mirror of the same kind. Kyoto Imperial University. Umehara, Kanizen fig. 21: 4.

J 6. Pl. 71. Background converging groups of parallel lines; remnants of dragons even more summary, and in simple, flat relief. *Honan region* (Yen-ling). Diam. 7.8 cm. MFEA (K. 11.276: 113).

J 7. Pl. 72. Background volutes and curved lines; four bosses placed on a circular concave band; four dragons, heads seen from above, two with the heads inside, and two outside the concave band; they are biting over a bend in their own bodies; diam. 9.3 cm. MFEA (K. 11.276: 115).

J 8. Pl. 72. Background volutes and groups of parallel lines; band and bosses as in the preceding; four dragons. Lagrelus collection.

J 9. Pl. 72. Background volutes and lines; band and bosses as in the preceding, dissolved dragons' bodies. *Shou-chou region*. Diam. 9.5 cm. Lagrelus collection.

J 10. Pl. 72. Background volutes; band and bosses as in the preceding ones; dissolved dragons of different shape from those of J 9. *Lo-yang region*. Staatl. Mus. Berlin.

A mirror of the same kind. *Shou-chou region*. Yen-k'u fig. 89.

J 11. Pl. 72. Similar to the preceding. *Shou-chou region*. MFEA (K. 10 599: 540).

A mirror of the same kind. *Shou-chou region*. MFEA (K. 10 599: 542).

A mirror of the same kind. *Shou-chou region*. Diam. 8 cm. Hellström collection.

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J 12. Pl. 72. Very similar to the preceding, but for the background, which has converging groups of parallel lines; diam. 8 cm. Lagrelus collection.

J 13. Pl. 73. Background volutes and lines; concave band with bosses, which have been adapted as centres of quatrefoils; four antithetical dragons, heads seen from above; diam. 12.5 cm. Crown Prince collection.

- J 14.** *Pl. 73.* Similar to the preceding, but dragons dissolved into arabesques. A Tokyo collection. Umehara, Kanizen fig. 21: 2.
- J 15.** *Pl. 73.* Quite similar to J 11 above, but without the concave band. *Huei-hien region*, Honan. Diam. «5 1/2 inches». Swallow pl. 44 b.
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- J 16.** *Pl. 73.* Background volutes and curved lines; bosses, remnants of dissolved dragons; the décor zone has a starshaped margin inside the rim, with the bows thus formed outside the arches raised in a higher plane (thicker); diam. 8 cm. Hellström collection.
- J 17, 18.** Two types with background and starshaped margin inside the rim quite like the preceding, yet more elaborate dissolved dragons; one mirror with and one without bosses. *Huei-hien region*, Honan. Swallow pl. 44 a, 45 a (too poor photos to be reproduced here).
- J 19.** *Pl. 73.* Quite like J 16 above, but the background consists of converging of groups of parallel lines; diam. 7.7 cm. Lagrelus collection.
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A mirror of the same kind. *Shou-chou region*. MFEA (K. 10.599: 544).
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- J 22.** *Pl. 74.* Similar to J 20, but the dragon remnants are different, and there are no bosses. MFEA (K. 11.074: 8).
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A mirror of the same kind. *Shou-chou region*. MFEA (K. 10.599: 538).
- J 24.** *Pl. 74.* Similar to the preceding but even more simplified. *Lo-yang region*. Diam. 7.8 cm. MFEA (K. 11.035: 17).
- J 25.** *Pl. 74.* Square central band with inscription (s. a. J 4 above); from the corners of the band project four stylized «brush»-like petals; in décor zone, background volutes and curved lines, remnants of dragons; starshaped margin inside the rim. *Lo-yang region*. Diam. 11.6 cm. Lagrelus collection.

The mirrors of this category belong to both the Lo-yang region and the Shou-chou region. They have a considerable affinity with the Shou-chou category F above: the double-lined dragons in thread relief in many instances, the background patterns, the modified «brush»-like petal (only in type J 25). But there are occasional reminiscences of other earlier classes: the «peripheral quatrefoils» of J 13 (cf. C 30, 50, 80, D 44)

and the starshaped margin, which is exceedingly rare in category F, but very common in the Lo-yang category D — though here it is applied in quite a new fashion, inside the rim, and with a new and peculiar thickening of the parts outside the arcs.

The date of this category has already been determined above; its inscribed specimens reveal that it belongs to the 2nd 'c. B. C.

CATEGORY K.

In the first and principal section of this category (K 1—7, 9—13) there is regularly a starshaped margin, with the bows outside the arches raised in a higher plane (thickened). A few of the specimens have a background-filling pattern; most have the background bare. As a second section I have added a few very simple mirrors (with rim) which have some features in common with the first section, and which on account of their small and fluted knob are referable to the same era (2nd c. B. C.).

- K 1. Pl. 75.** Animal figure worked into the knob; square central band with inscription (only in part discernible: »May he who uses [the mirror] become a prince or a high minister; a thousand autumns . . . constant joy without end«); TLV arrangement; background volutes and curved lines; four bosses and eight dragons. Winthrop collection. Umehara, Seikwa 4: pl. 43.
- ✓ **K 2. Pl. 75.** Animal figure worked into the knob; square central band with inscription (»May we always think of each other and not forget each other; constant wealth and prosperity; joy without end«); in décor-zone, background volutes and curved lines; four bosses and four big dragons. Bidwell collection. Umehara, Seikwa 4: pl. 42.
- K 3. Pl. 75.** Square central band with inscription (»When you see the light of the sun, the world is very bright«); from the central band four petals drawn out and cleft at the top; four bosses and four dragons. Bidwell collection. Umehara, Seikwa 4: pl. 48.
- K 4. Pl. 76.** Animal figure worked into the knob; square central field delimited by a double-line; four bosses and four dragons. Oeder collection.
- K 5. Pl. 76.** Animal figure worked into the knob; square central band with inscription (two characters of which I cannot decipher: »When you see the light of the sun, the whole world is very bright; may he who carries [the mirror] become a prince or a high minister; extended years and increased longevity; may we not forget each other; . . . without end«); from the corners of the central band heart-shaped petals, flanked by comma-shaped leaves; from the sides of the central band corrupted forms of »brush«-like petals (cf. F 1—9); diam. 13.2 cm. Calmann collection, Paris. Also in the Chinese Exhibition pl. 33: 465.
- K 6. Pl. 76.** Akin to the preceding, but ordinary knob, shorter inscription (»When you see the light of the sun, the whole world is very bright«); from the sides of the central band two corrupted »brush«-like petals. Ku king ying pl. 18.
- K 7. Pl. 76.** Animal figure on knob, for the rest like the preceding, except inscription (»Great and superior wealth and prominence; constant joy without end; extended

- years and increased longevity; I would be happy if I were not forgotten»). Ku king t'u lu, hia 17 b.
- K 8. Pl. 76.** Ordinary knob, shorter inscription, simpler corner petals. Ku king t'u lu, hia 16 b.
- K 9. Pl. 77.** Animal figure worked into the knob; TLV arrangement; four bosses, eight corrupted »brush«-like petals. David-Weill collection. Umehara, Seikwa 4: pl. 47 b.
- K 10. Pl. 77.** Very similar to the preceding, but an inscription placed outside the central band (»Constant joy without end; may we never forget each other«); diam. 13.5 cm. Lagrelus collection.
- K 11. Pl. 77.** Knob hemispherical, surrounded by a quatrefoil; square central band with inscription (»When you see the light of the sun, may you have constant joy without end«); corner petals of same type as K 5 above; four bosses with petals outside, on each side of central band two corrupted »brush«-like petals. Crown Prince collection.
- K 12. Pl. 77.** Same type as the preceding, but inscription different (»When we see the light of the sun, may we never forget each other«); diam. 11.7 cm. Lagrelus collection.
- K 13. Pl. 78.** Knob and quatrefoil as in the preceding; square central band with inscription (»When you see the light of the sun, the whole world is very bright; what you say will be true«); at corners of central band corrupted »brush«-like petals; four bosses, under them dragons and above them simple petals; diam. 15.3 cm. MFEA (K. 12.431).
- K 14. Pl. 78.** Square central band, from corners of which project leaf-like petals, as in K 8 above; four bosses, freely placed inscription (»Constant joy without end, may we never forget each other«). *Lo-yang region*. Diam. 9.5 cm. MFEA (K. 11.035: 1).
- K 15. Pl. 78.** A strongly simplified type, the figures at the corners of the central square appearing to be reductions of those in K 5 above; inscription (»May we never forget each other«). Ku king t'u lu, hia 15 a.
- K 16. Pl. 78.** Another very simple type; the figures (V) at the corners of the central band appear to be remnants of the TLV arrangement as seen in K 1 above; inscription (»I wish that we may always think of each other«). Ku king t'u lu, hia pl. 16 b.
- K 17. Pl. 78.** Round central band; in principal zone four bosses and inscription (same as K 10 above). Ku king t'u lu, hia 15 a.

The majority of the mirrors of this category are to be dated in the 2nd c. B.C., as demonstrated on p. 26 above. They have the small, fluted knob of the early mirrors, and their inscriptions are in Small seal, pure or stylized. I have, however, inserted three specimens (K 11—13) which, though closely akin to types K 6—10, yet have the bigger, hemispherical knob which we find again in category L below, and which from

the 1st c. B. C. onwards became the regular mirror knob of the Han mirrors. There we can see that in some of its variants this mirror class passed the mile-stone 100 B. C. and lived on, slightly changed, into the 1st c. B. C.

The last four mirror types (second section) K 14—17 are very much simplified and poor types, and, though undoubtedly anterior to mirrors with big hemispherical knobs, they are in all probability to be placed late in the 2nd c. B. C.

CATEGORY L.

I do not intend to treat this comprehensive and important category in detail in the present paper. Here I have only recorded a few examples, sufficient to lend support to my epigraphical and chronological arguments in the introduction above. I hope to revert in another work to the numerous variants and interesting décor problems of this great class. Here the knob is always big and hemispherical, the mirror mostly large and heavy, the rim much thicker than the central field, the metal often much whiter than in the pre-Han mirrors.

- ✓ **L 1. Pl. 79.** Round the knob is a quatrefoil; in the square central band, inscribed with the twelve horary characters, there are twelve bosses, in the principal décor field TLV and eight bosses, surrounded by discs with star-shaped figures, like miniature mirrors; the zone is crammed full of figures of phantastic animals and elfins (sitting or riding), cf. the shapes seen on L 2 below; outside all this are several bands, one with an inscription, one with slanting strokes, one with acute-angled triangles, and then the rim with wavy ornaments. Inscription: »The Shang-fang has made the mirror, it is greatly without blemish; Sin (the New dynasty) has good copper, it comes from Tan-yang; I have refined and worked it together with silver and tin, it is pure and bright; a skilled artisan has engraved it and achieved a decoration; to the left the Dragon and to the right the Tiger eliminate what is baleful; the Red Bird and the Black Warrior (= the tortoise) conform to the Yin and Yang forces; may your sons and grandsons be complete in number and be in the centre; may you long preserve your two parents; may your joy and wealth be splendid.« Diam. 22 cm. Lagrelius collection.

- L 2. Pl. 79.** Very similar to the preceding, though the details of the figure décor are not quite identical. Inscription: »Mr. Wang has made the mirror; the barbarians of the four directions have submitted; much do I congratulate the New Dynasty (i. e. Wang Mang); the people have got rest; the Hu slaves (i. e. tribes of the North) are destroyed and exterminated; the empire is restored; wind and rain are timely and temperate, the five kinds of grain ripen; may you long preserve your two parents; may your sons and grandsons be strong; may your official position be august and illustrious; may you receive emoluments and food; may you hand it down and thereby inform later generations; may you have joy without limit; may you have great profit«. Ku king t'u lu, chung 23 a.

- L 3. *Pl. 80.* Similar in its general features to the preceding two, but the animal décor much simpler. Inscription: «Sin (the New dynasty) has good copper, it comes from Tan-yang; I have mixed it with silver and tin, it is pure and bright; to the left the Dragon and to the right the Tiger rule the four quarters; the Red Bird and the Black Warrior conform to the Yin and Yang forces; may your eight sons and your nine grandsons govern . . .» (broken off). MFEA (K. 11.289).
- L 4. *Pl. 80.* Similar to the preceding, except the décor of the rim; inscription the same as the preceding in its first part («Sin has . . . Yin and Yang forces»); diam. 16.4 cm. MFEA (K. 11.034: 101).
- L 5. Very similar to the preceding, but inscription different: «Sin (the New dynasty) has erected a Pi-yung and built a Ming-t'ang; may you be illustrious among promoted scholars and take your place among princes and kings; may your sons and grandsons be complete in number and rule the centre». Ku king t'u lu, chung 6 b.
- L 6. *Pl. 80.* Similar in general arrangement to the preceding ones, but the principal décor zone greatly reduced and simplified, and the décor of the rim quite different; inscription: «Sin (the New dynasty) has erected a Pi-yung and built a Ming-t'ang; may you be illustrious among promoted scholars and take your place among princes and kings . . .; ten thousand huts of students are in the North; may you have joy without end» (some characters unreadable). Tomioka, Kokyō no kenkyū pl. 41 a.

As stated above, these are only a few samples of a very rich and comprehensive class. I have already discussed its date at length above, and come to the conclusion that, whereas the specimens quoted here belong to the period 9—23 A. D., as shown by the content of their inscriptions, the category as a whole extends over the period ca. 100 B. C.—ca. 100 A. D.

The principal object of the present paper has been to find a conclusive answer to the question: did the Huai style, such as we know it from a great many splendid specimens from the later half of the Chou dynasty and the period of the Warring States, survive the political cataclysm during the last decades of the 3rd c. B. C., and the establishment of the Han dynasty in 206 (202) B. C.? Did it continue, still vigorous and unaltered, well on into the 2nd c. B. C., the era of the early Han? We know from specimens with ✓ pre-Han inscriptions, and from objects in the Sin-cheng, the Li-yü, the Kin-ts'un and the Shou-chou finds, how the bronze art and kindred branches were characterized during the centuries ca. 650—ca. 200 B. C. Were objects of quite the same kind, with the same shapes, the same décor and the same technique, manufactured also after 200 B. C.?

We started our inquiry by an examination of some types of ritual bronzes, and there we found an abrupt change from the very beginning of the Han era (ca. 200 B. C.): the great and important category of Ting tripods, which anterior to 200 B. C. had very

often been profusely decorated on the principal surface, were now always left entirely bare from 200 B. C. onwards, appealing exclusively through their shapes and their shiny smooth surface. The big bells, which were the pride of the period 650—200 B. C., with their exuberant and magnificent décor, disappear altogether after 200 B. C. Having verified this, we went a step further and made the mirrors a special object of this inquiry. The mirrors, exceedingly rich and varied in types, and often provided with telling inscriptions, furnished an excellent material for this investigation. The question consequently was this: can we establish that certain classes of mirrors were made exclusively before 200 B. C., and never continued to be produced after that date, and that other classes belong exclusively to the period from 200 B. C. onwards? Or was it, on the contrary, that mirror types which we can confidently conclude to have already existed in the 4th and 3rd centuries B. C., were also continuously manufactured, quite unaltered, in the 2nd c. B. C.?

Our extensive and detailed examination of the various mirror categories has furnished us with a very definite answer, which emphatically indicates in the former alternative. The mirrors confirm what the Ting tripods and big bells have already suggested: that the date ca. 200 B. C. is a real mile stone, separating the Huai style from the Han style.

The great mirror category C (mainly Shou-chou), with all its rich variations, was entirely a product of the 5th—3rd centuries B. C., and probably it did not even reach the date 200 B. C. but became obsolete around 250 B. C.

The great category D (Lo-yang) covered the 4th and 3rd centuries, but never transgressed the date 200 B. C.; it came to an end when the Han dynasty started.

The great category E (Shou-chou) flourished during the latter half of the 3rd c. (ca. 250—ca. 200 B. C.), but did not exceed this limit; it did not live on, unaltered, in the early Han era; the same probably applies to the smaller category G (though the *points-d'appui* here are much weaker).

The great category F (in its two important sections) did not commence earlier than ca. 200 B. C., and covered the 2nd c. B. C. It should be emphasized that though category F is strongly akin to the pre-Han category E, and in fact forms a sequel to that category, this certainly does not mean an identical or even an essentially unaltered continuation of the E category; it means, on the contrary, a new Han class built up on the foundations of the pre-Han class E, with fundamental and important innovations. We remember that the Middle Chou style, which arose around 950 B. C., took over many vessel shapes and décor motifs from the earlier Yin and Yin-Chou styles, but its innovations were sufficiently drastic to make it a new style. In the same way, the Huai-style class E did not live on, fundamentally unchanged, across the time limit ca. 200 B. C., into the 2nd c. B. C., but was superseded in that century by the Shou-chou class F, a Han-style creation which in important respects drew upon the earlier class E.

Categories H, J and K fall entirely within the 2nd c. B. C., the early Han era (a few late specimens even in the early 1st c.), and did not at all exist anterior to ca. 200 B. C.

Thus the mirrors give no support whatsoever to the idea of an unaltered Huai style lingering on for half a century or a whole century in the early Han epoch; on the contrary,

they afford decided evidence that the Huai style died out with feudal China; in its last phases it most probably continued through the short reign of Ts'in Shih-huang-ti (221—210) and the following years of anarchy (210—202). But when China rose again to new power and health, a united centralized imperial state, which was soon to become a great East Asiatic empire, the Huai style that flourished between ca. 650 and ca. 200 was quite dead, and the Han art, though building on the foundations of the earlier epochs, had essentially acquired an entirely new style.

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23. Lagrelius coll.	» »
24. Lagrelius coll.	3rd c. B. C.
25. Sedgwick coll.	» »
26. Hosokawa coll.	» »
27. Royal Ontario Mus.	» »
28. Meyer coll.	3rd c. B. C.
29. Tsun Ku chai coll.	» »
30. Crown Prince coll.	» »
31. Oeder coll.	3rd c. B. C.
32. Oda coll.	» »
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34. Worch coll.	» »
35. Staatl. Mus. Berlin.	3rd c. B. C.
36. Oeder coll.	» »
37. MFEA.	» »
38. Lagrelius coll.	3rd c. B. C.
39. Hallwyl coll.	» »

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	<i>E 3.</i>	Crown Prince coll.	» »
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	<i>E 11.</i>	Lagrelius coll.	» »
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	<i>E 16.</i>	Karlbeck coll.	» »
	<i>E 17.</i>	British Museum.	» »
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36.	An Osaka coll.	» »
37.	Lagrelius coll.	» »
38.	Lagrelius coll.	» »
39.	Lagrelius coll.	3rd c. B. C.
40.	Hellström coll.	» »
41.	Staatl. Mus. Berlin.	» »
42.	Staatl. Mus. Berlin.	3rd c. B. C.
43.	Becker & Newmann.	» »
44.	Michon coll.	» »
45.	Staatl. Mus. Berlin.	» »
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2.	Karlbeck coll.	» »
3.	MFEA.	» »
4.	MFEA.	2nd c. B. C.
5.	Yamanaka.	» »
6.	Imp. Mus. Tokyo.	» »
7.	Lagrelius coll.	2nd c. B. C.
8.	Lagrelius coll.	» »
9.	Mus. Amsterdam.	2nd c. B. C.
10.	Lagrelius coll.	» »
11.	British Museum	» »
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12.	Yamanaka.	» »
13.	Yamanaka.	» »
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16.	Crown Prince coll.	» »
17.	Karlbeck coll.	» »
18.	MFEA.	» »
19.	Crown Prince coll.	» »
1.	Lagrelius coll.	2nd c. B. C.
2.	MFEA.	» »
3.	Crown Prince coll.	» »
4.	Staatl. Mus. Berlin.	» »
5.	Mus. F. Arts, Boston.	» »
6.	Lagrelius coll.	» »
7.	Karlbeck coll.	2nd c. B. C.
8.	MFEA.	» »
10.	Lagrelius coll.	» »
11.	Lagrelius coll.	» »
12.	Lagrelius coll.	» »
1.	Mus. F. Arts, Boston.	2nd c. B. C.
2.	MFEA.	» »
3.	Lagrelius coll.	» »
4.	MFEA.	» »
5.	Lagrelius coll.	» »
6.	MFEA.	» »
7.	MFEA.	2nd c. B. C.
8.	Lagrelius coll.	» »
9.	Lagrelius coll.	» »
10.	Staatl. Mus. Berlin.	» »
11.	MFEA.	» »
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13.	Crown Prince coll.	2nd c. B. C.
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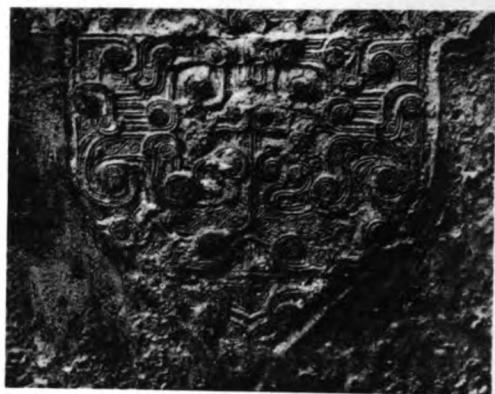


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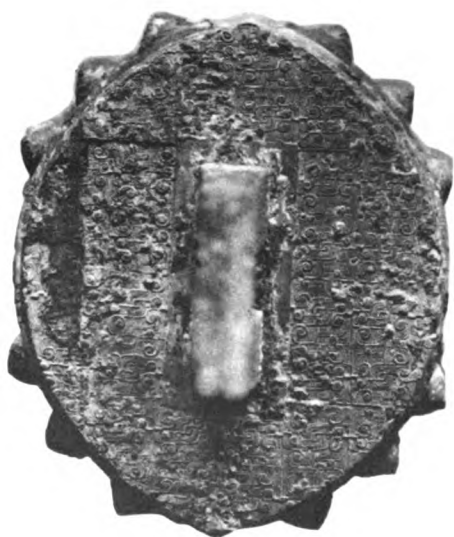
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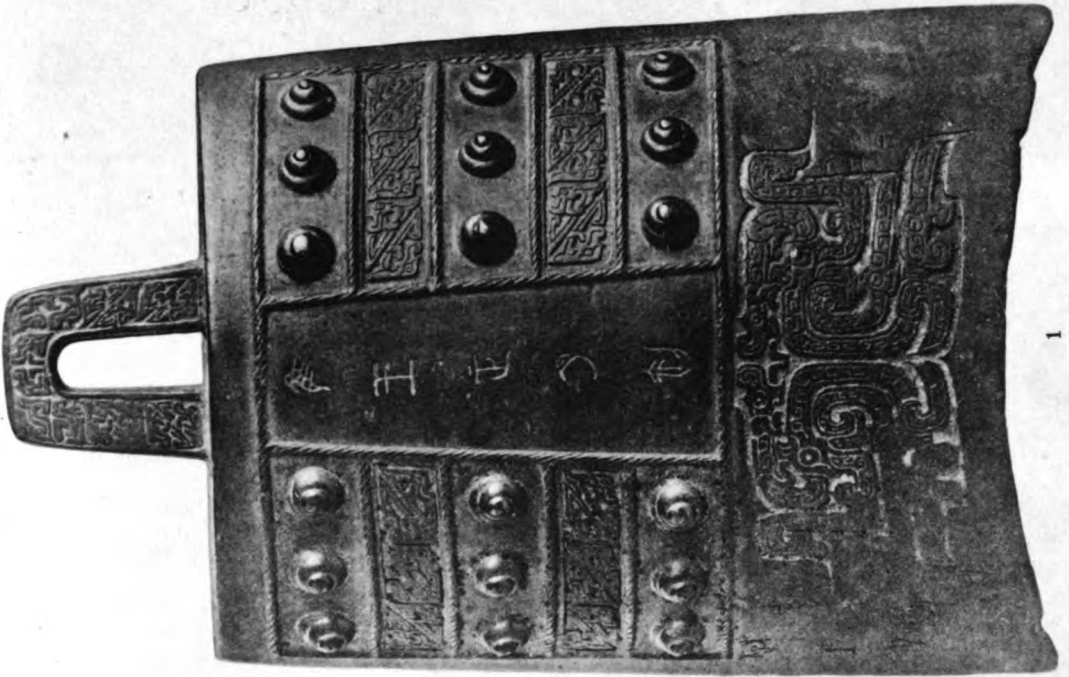
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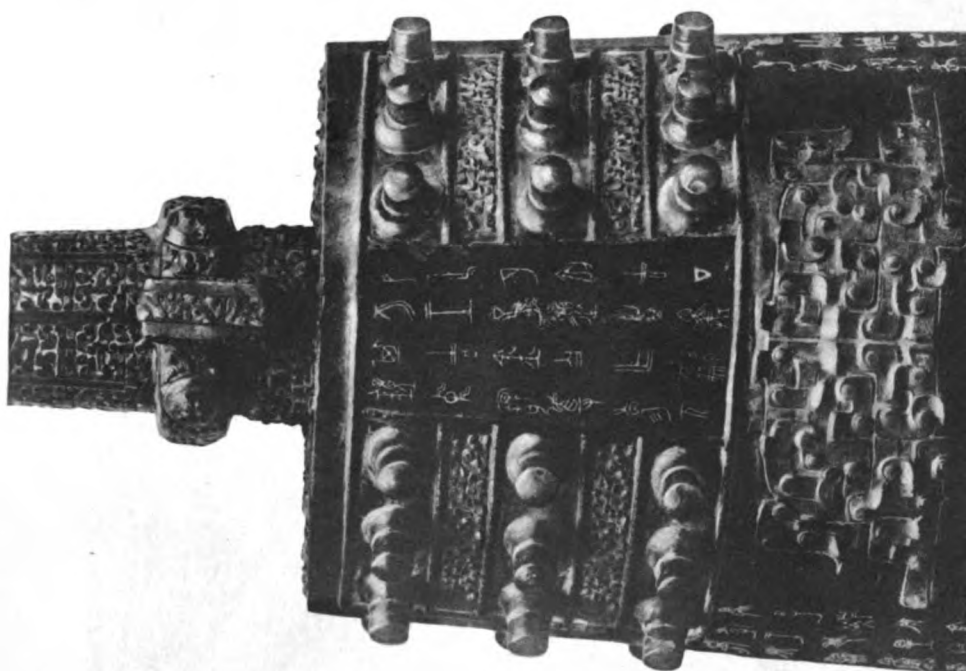
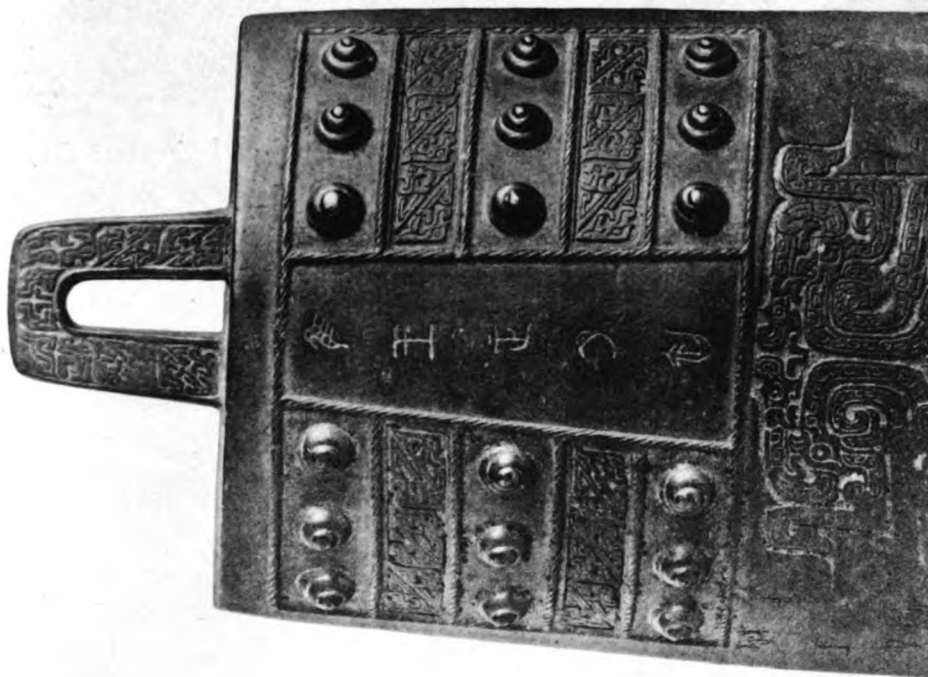


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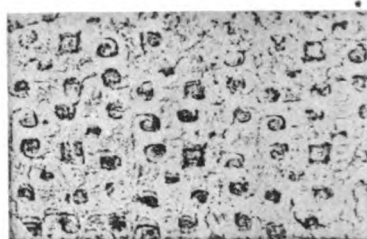
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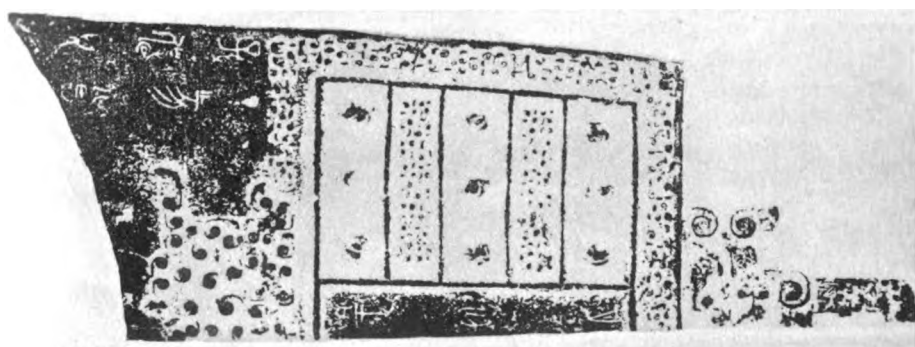
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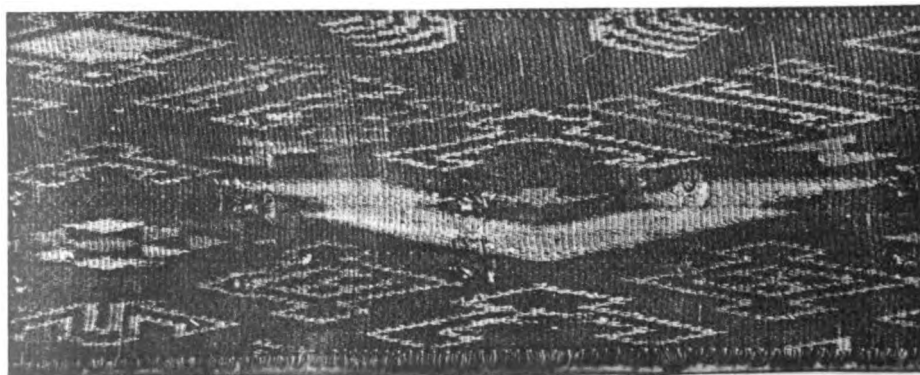
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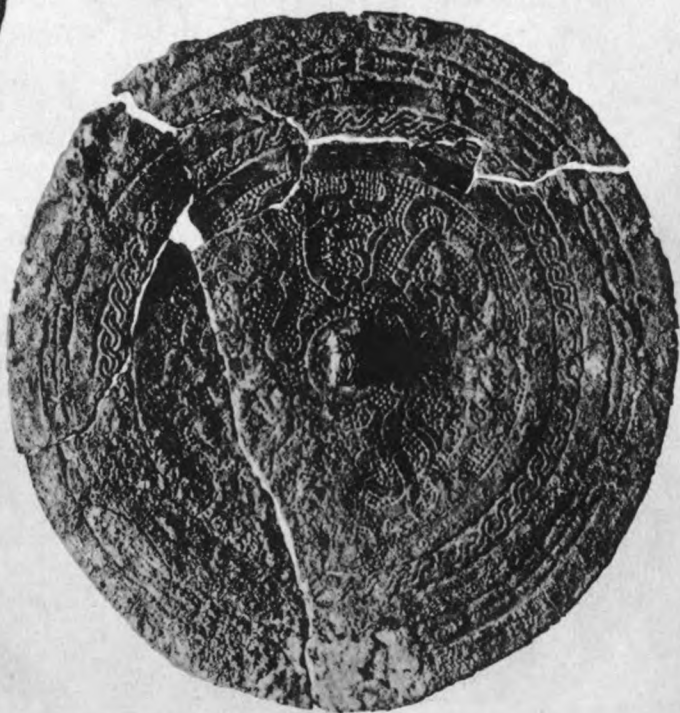
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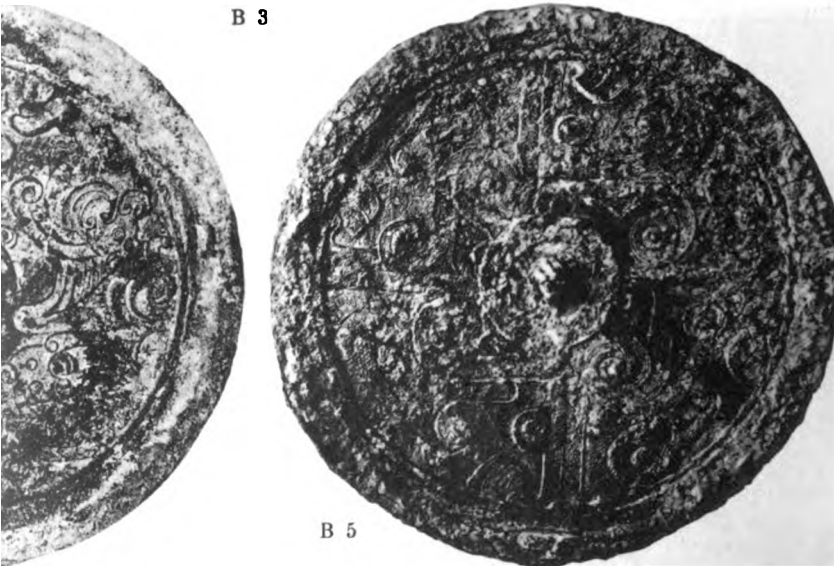
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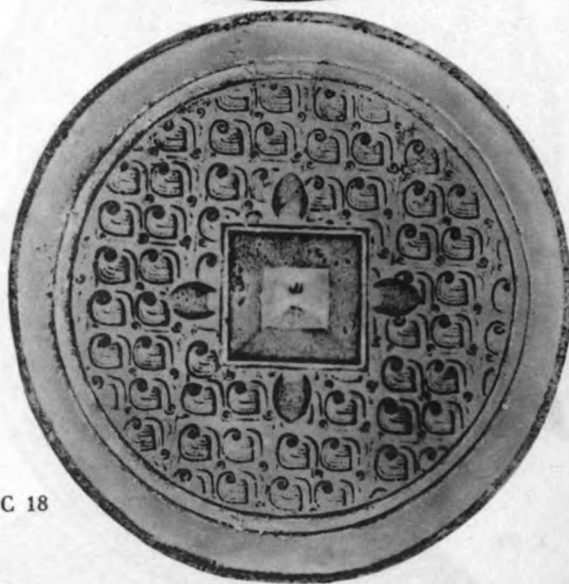
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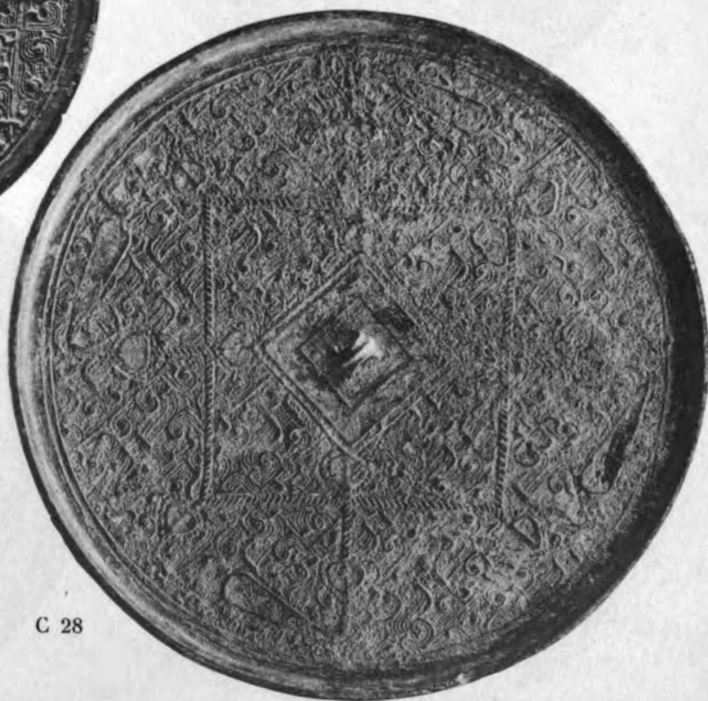
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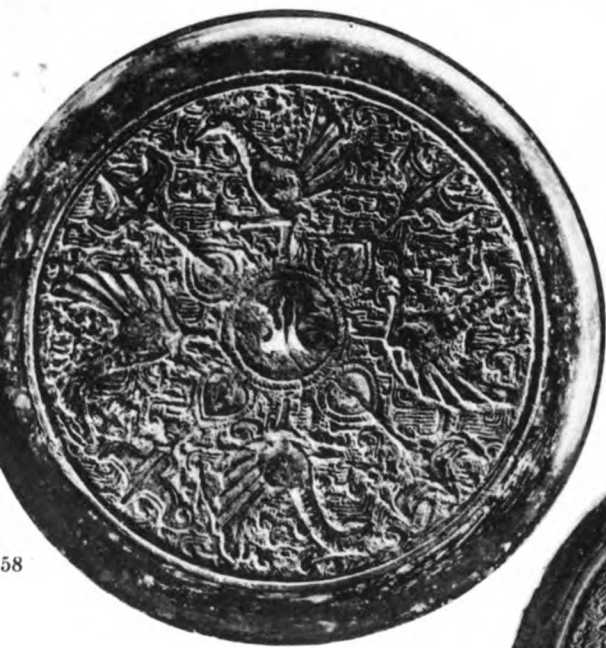
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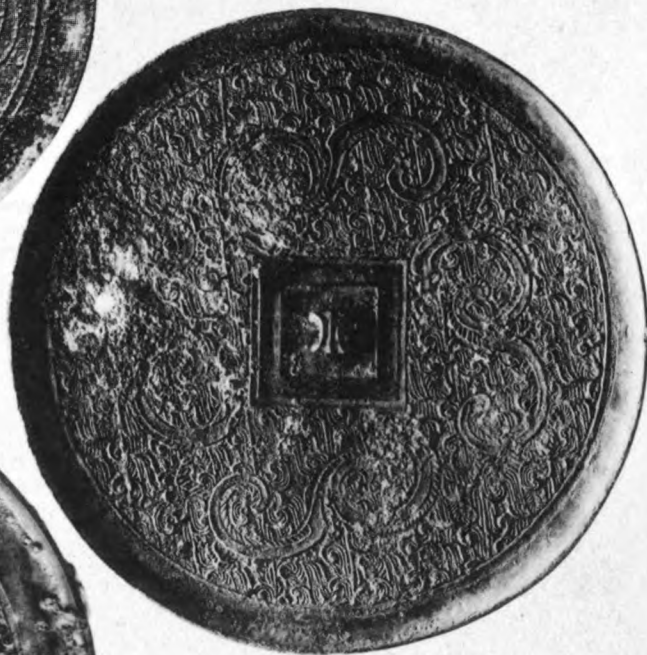
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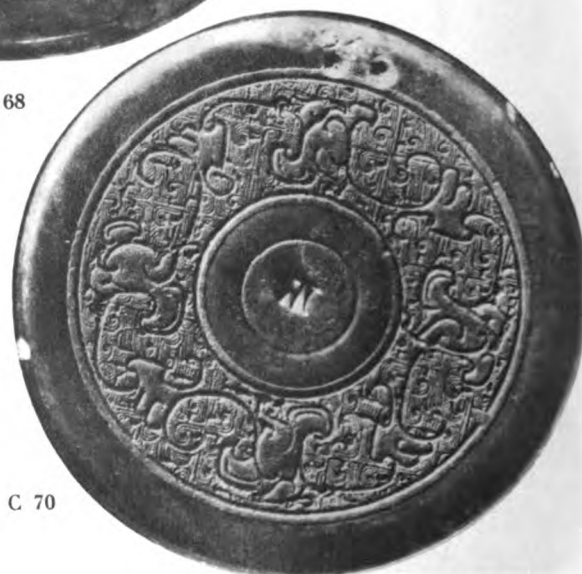
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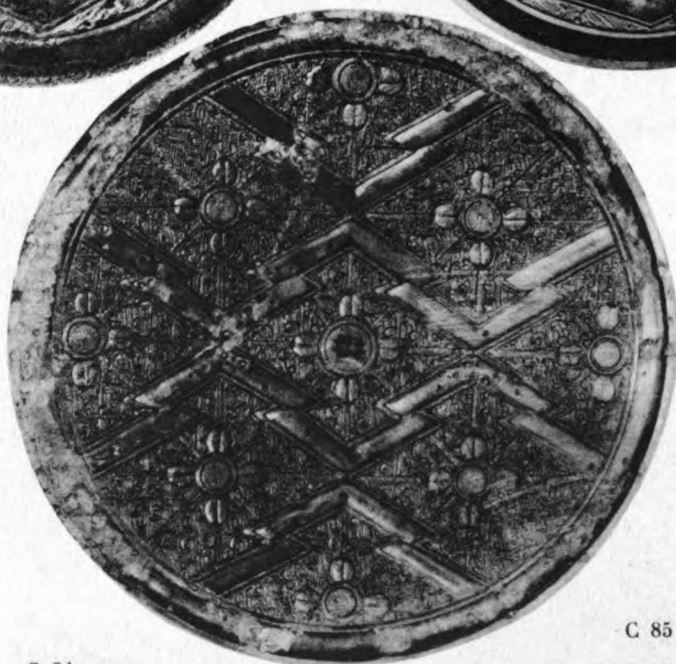




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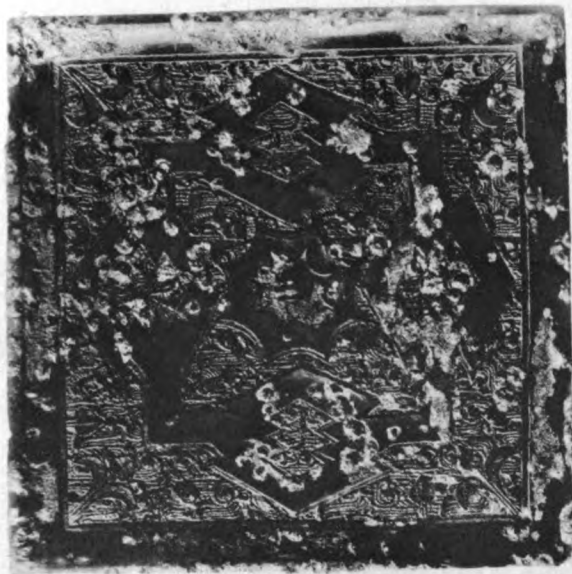


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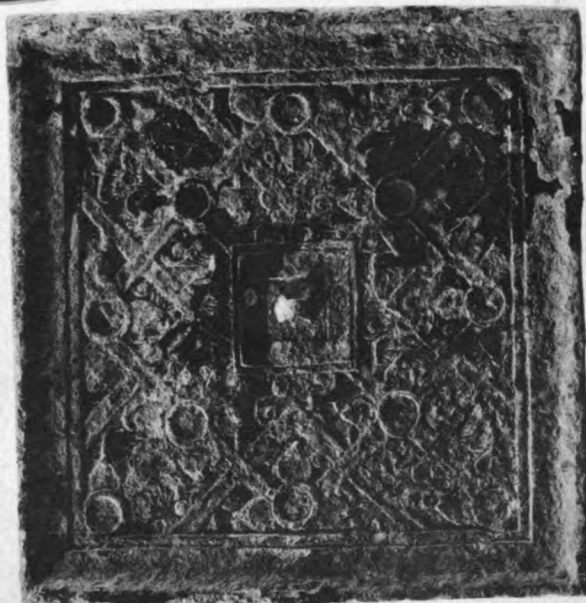


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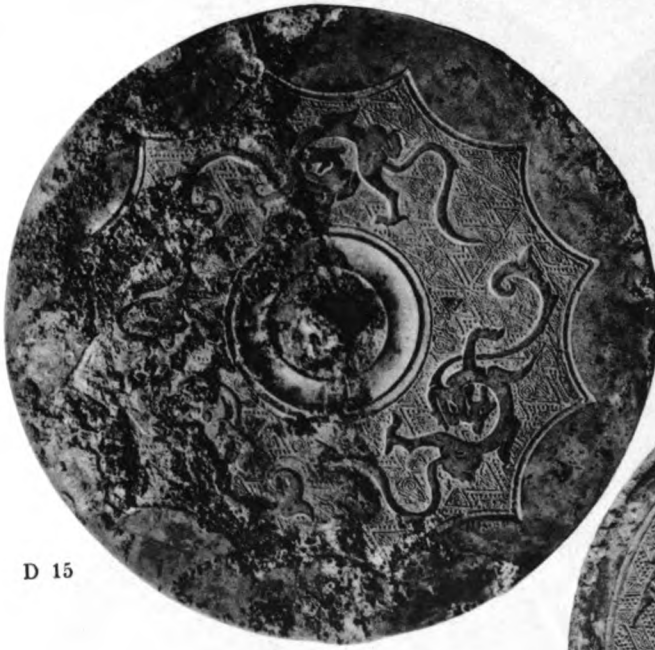
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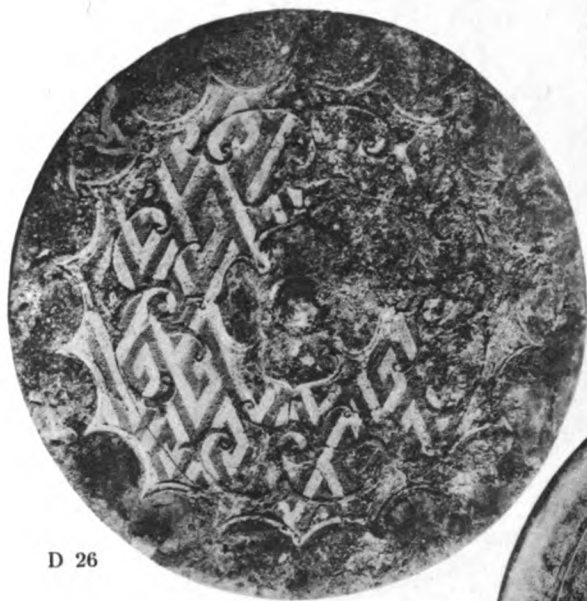
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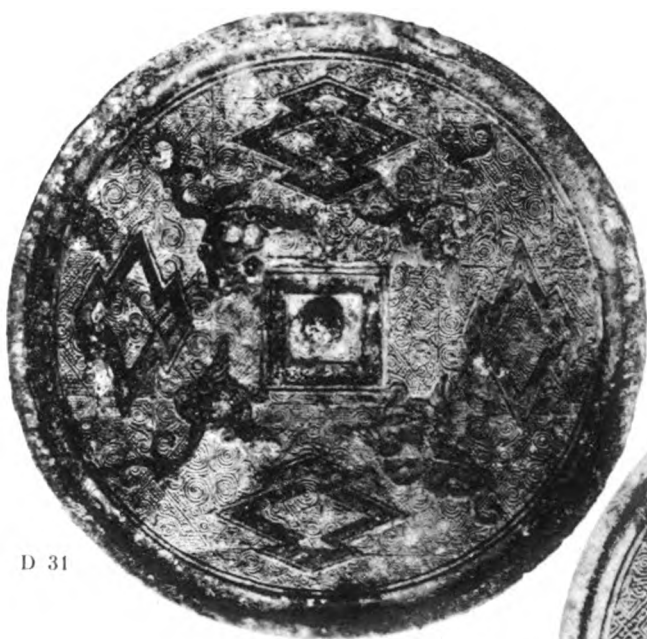
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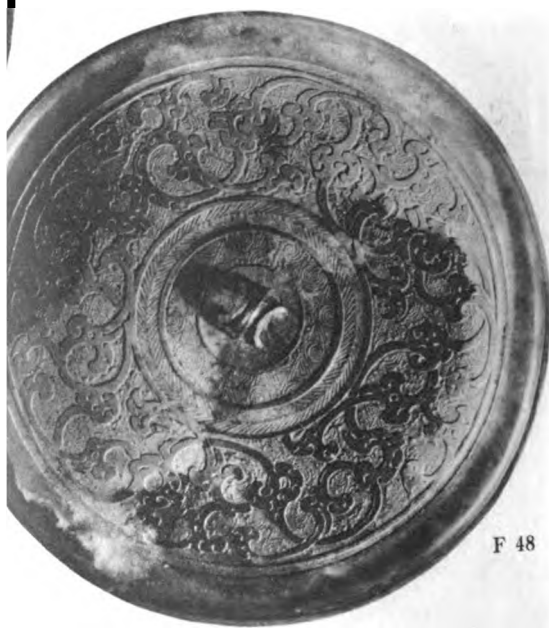
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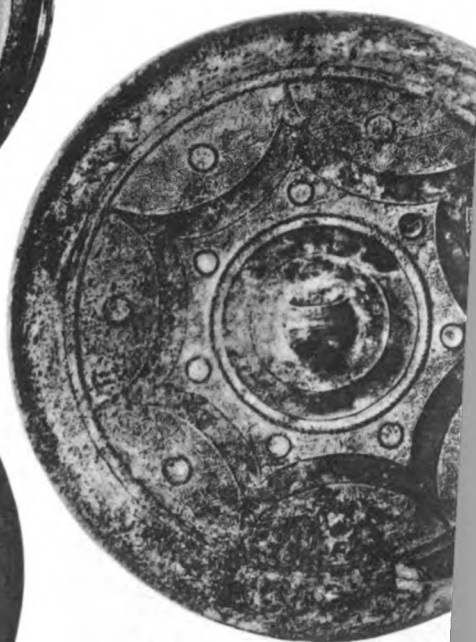
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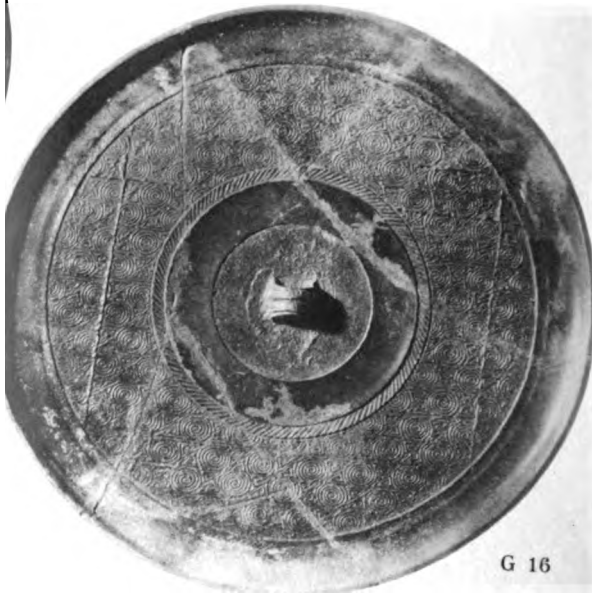
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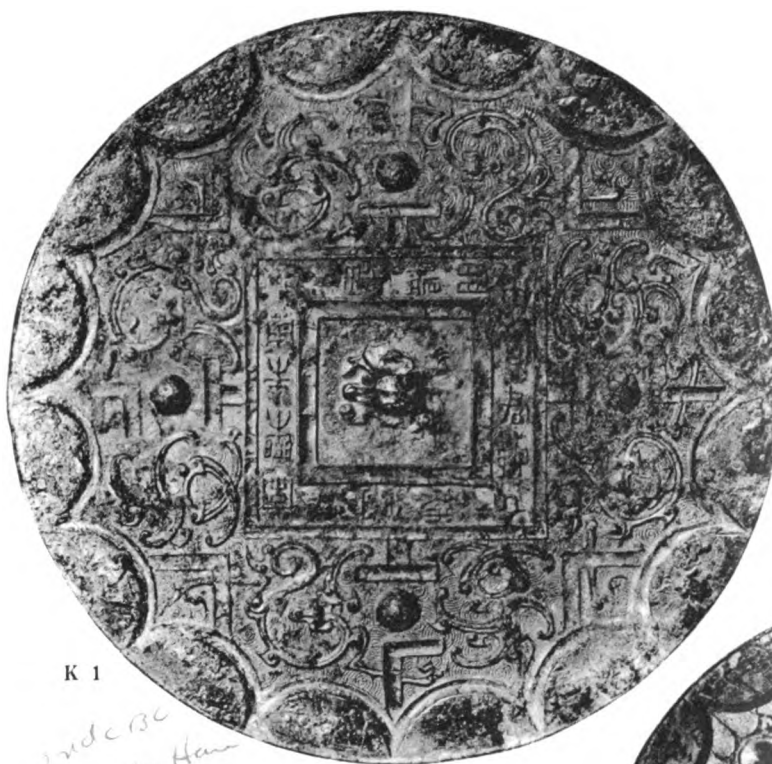
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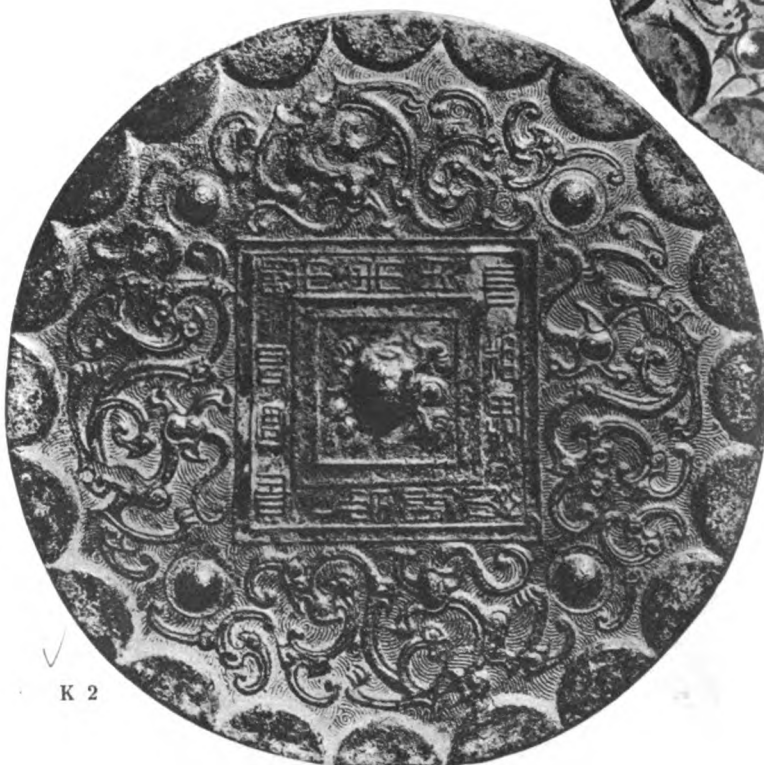


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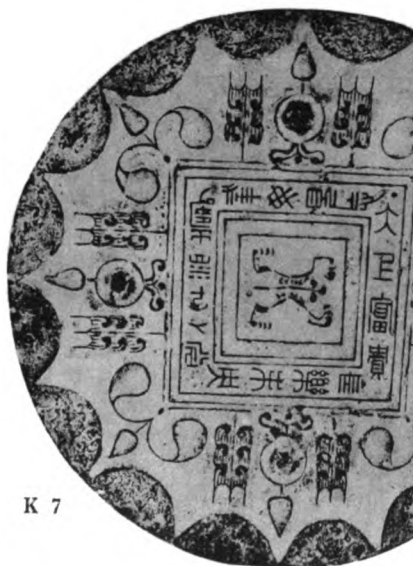
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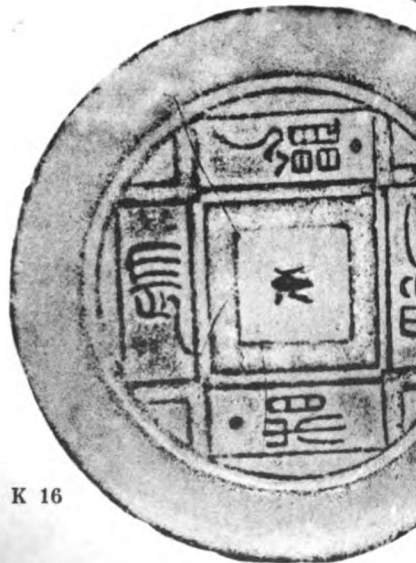
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